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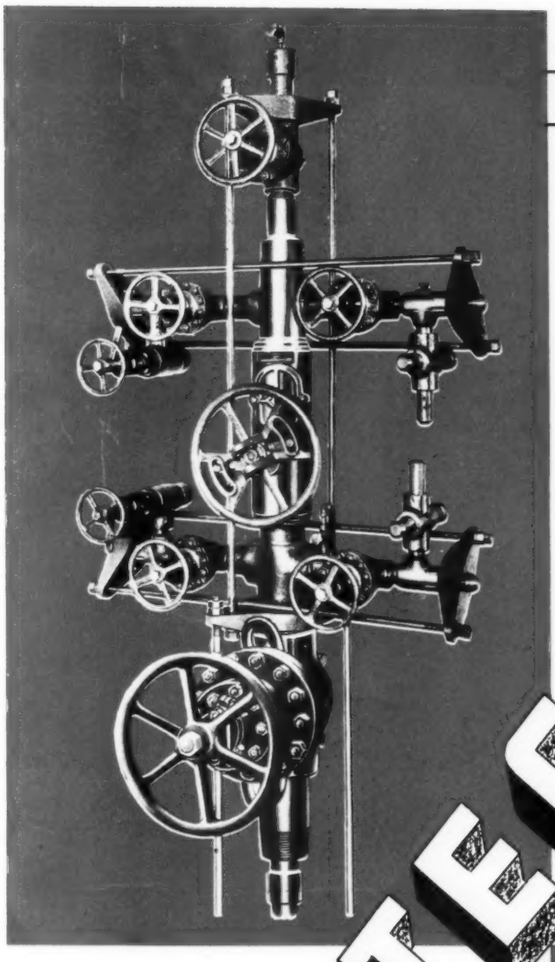

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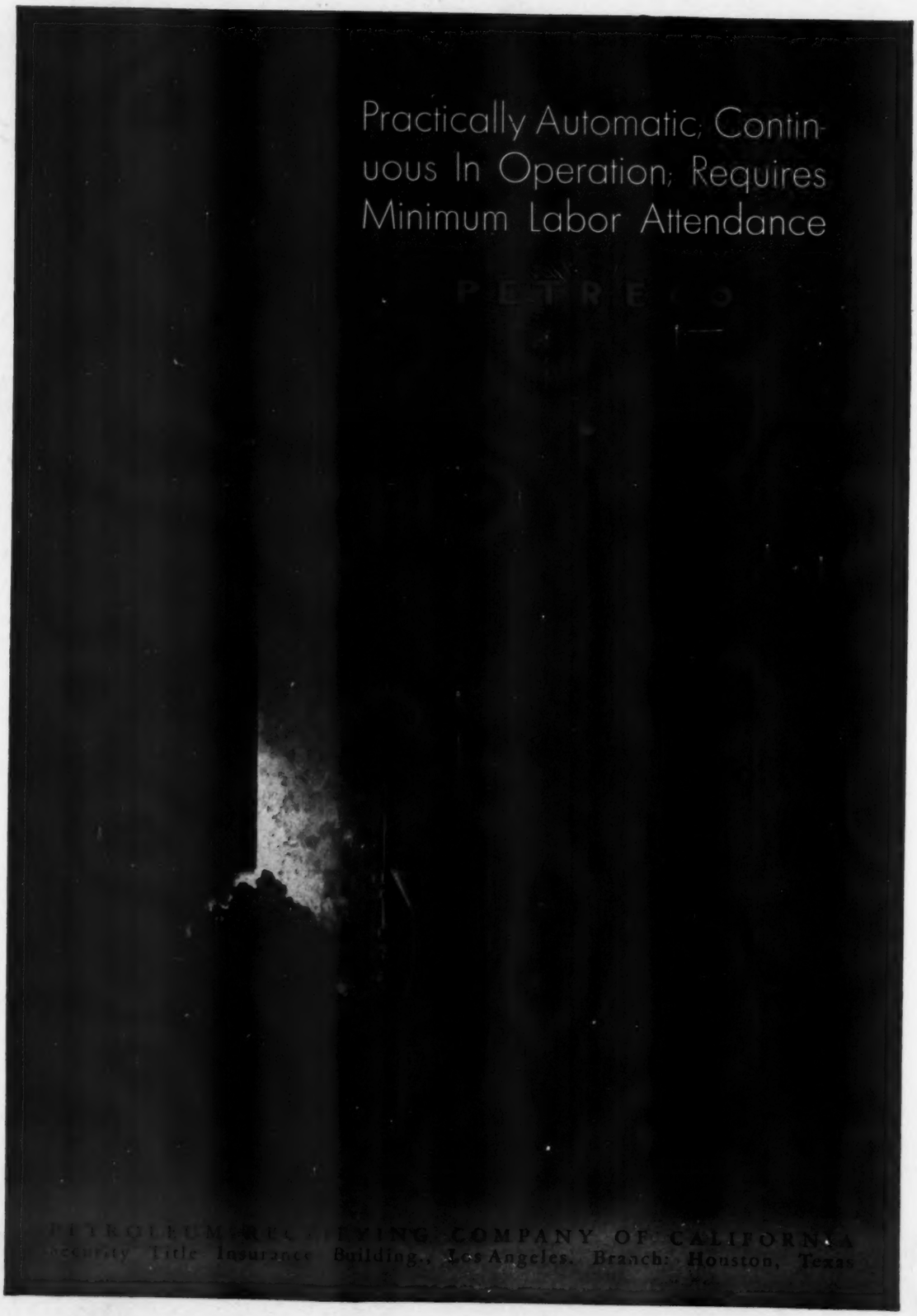
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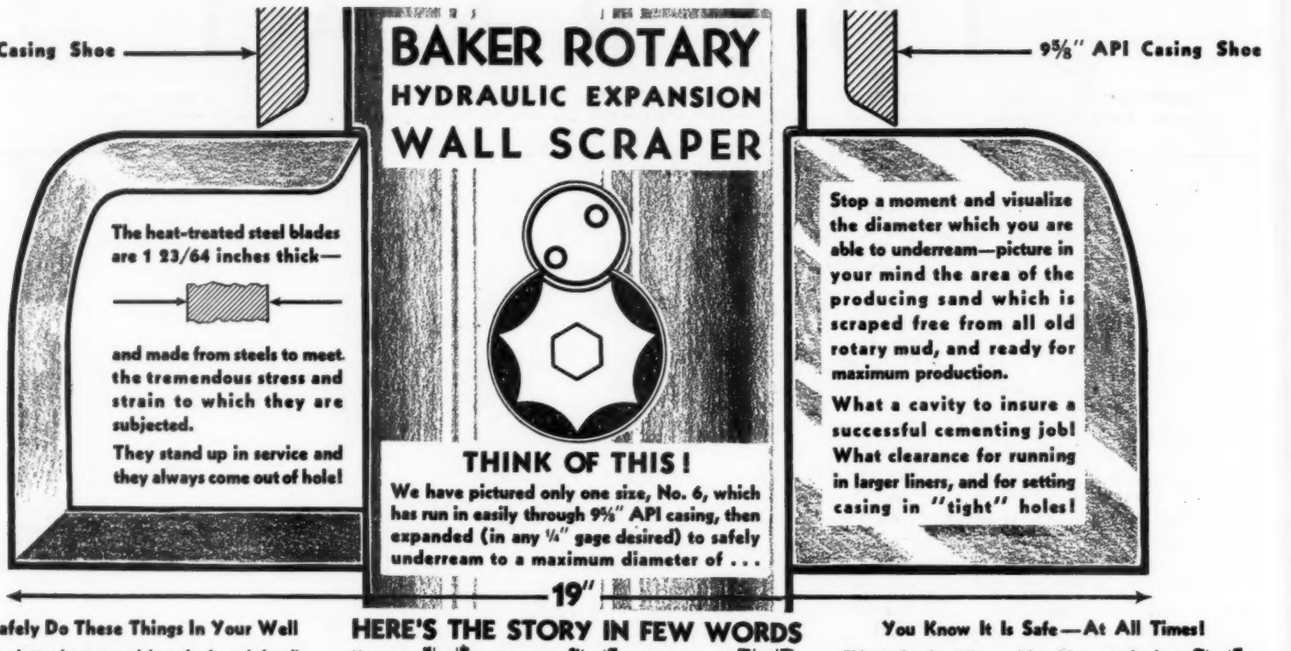
Wide EXPANSION and SAFETY Go Hand in Hand


9⅝" API Casing Shoe
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HYDRAULIC EXPANSION
WALL SCRAPER
9⅝" API Casing Shoe
The heat-treated steel blades are 1 23/64 inches thick—
and made from steels to meet the tremendous stress and strain to which they are subjected.
They stand up in service and they always come out of hole!
THINK OF THIS!
We have pictured only one size, No. 6, which has run in easily through 9⅝" API casing, then expanded (in any ¼" gage desired) to safely underream to a maximum diameter of . . .
19"
Stop a moment and visualize the diameter which you are able to underream—picture in your mind the area of the producing sand which is scraped free from all old rotary mud, and ready for maximum production.
What a cavity to insure a successful cementing job! What clearance for running in larger liners, and for setting casing in "tight" holes!

You Can Safely Do These Things In Your Well

1—Scrape the plastered rotary mud from the face of the oil sand, and enlarge the area of this sand to obtain maximum production.

2—Start a wide, square shoulder as the first step in straightening a crooked hole.

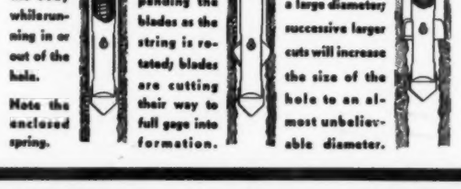
3—Enlarge the hole for easy setting of larger liners—eliminate turning-down couplings.

4—Underream to the required diameter to set casing in "tight" holes.

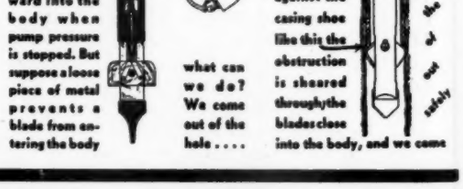
5—Scrape the walls of the hole before cementing, to insure a better bond with the formation.

AND MANY OTHER USES YOU NEVER DARED BEFORE!

HERE'S THE STORY IN FEW WORDS


Here the blades are safely within the body while running in or out of the hole.
Note the enclosed spring.
and here the pumps have been started, expanding the blades as the string is rotated; blades are cutting their way to full gage into formation.
and here the blades are fully expanded and cutting to a large diameter; successive larger cuts will increase the size of the hole to an almost unbelievable diameter.

You Know It Is Safe—At All Times!

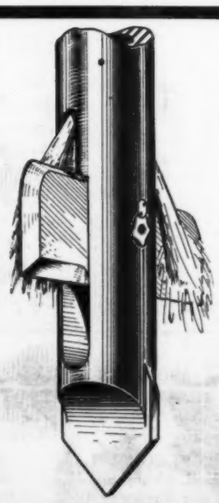

This sectional view shows how the blades may drop downward into the body when pump pressure is stopped. But suppose a loose piece of metal prevents a blade from entering the body
like this
what can we do? We come out of the hole . . . .
and when the top of the blade strikes against the casing shoe like this the obstruction is sheared through the blades close into the body, and we come
hole! the oil out safely

BAKER ROTARY HYDRAULIC EXPANSION WALL SCRAPER

SAFE CLEARANCE—AMAZING EXPANSION

Pick out any size you like and note the clearance between the body O.D. and the casing. Then check "maximum reaming capacity" to visualize the amazing range of expansion.

SIZE NUMBERS	2	3	3-A†	4	5	6	8
A.P.I. Tool Joint Pin Size	2 7/8"	3 1/2"	3 1/2"	4 1/2"	5 9/16"	6 5/8"	6 5/8" or 8 5/8"
Pin Specification	As Desired	As Desired	As Desired	As Desired	As Desired	As Desired	As Desired
Min. Reaming Size	4"	5"	5 3/4"	6 1/4"	7 3/4"	9 1/4"	10 3/4"
Max. Reaming Size	6 1/2"	9 3/4"	11"	11"	14"	19"	29"
Largest O.D. of Body	3 5/8"	4 1/2"	5 1/8"	5 3/4"	6 3/4"	7 3/4"	10"
Recommended Minimum Size A.P.I. Casing to be run in	4 3/4"	6 5/8"	7"	8 1/8"	9"	9 5/8"	13 3/8"
ABSOLUTE Minimum Size A.P.I. Casing to be run in	4 3/4"	5 3/4"	6 5/8"	7"	8 5/8"	9"	11 3/4"
Pilot Bit Gage Size	3 3/4"	5 1/4"	5 1/2"	6"	7 1/4"	8 1/4"	10 1/2"



A COUPLE OF UNUSUAL JOBS

For Setting Casing—Due to emergency orders of State Commission, this operator was required to run in through 13"-O.D. 50 lb. casing, ream a 12¼" diameter hole to 15" and set 10¾" casing through the 13" casing. A No. 6 Baker Wall Scraper with 15" blades enlarged the hole in *one run;* 10¾" casing was easily run and cemented; and the *operator reported a saving* of $600 to $700 *over any other* possible method.

For Formation Testing—Another operator set and cemented casing 5 feet off bottom. A Baker Wall Scraper—No. 4—with *one set* of 10½" blades, was used to enlarge 7⅞" hole to 10½" *through the cement* to a point 2 feet below the shoe. A formation tester was then run to test the water shut-off around the shoe.

[In the complete bulletin there are many interesting examples of how other operators are using the Baker Wall Scraper. Tell us where to send your copy—there's no obligation.]

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Industry Continues Optimistic in Spite of Belief Federal Oil Control Bill Will Not Be Passed

By ANDREW M. ROWLEY

UNLESS President Roosevelt intervenes personally in its behalf it seems the Federal oil control bill is doomed to failure of passage at this session of Congress. Many believe the President will request that the Interstate and Foreign Commerce Committee of the House, where the bill now reposes, report it to the House for passage. However, the oil industry, running true to form, is not convinced the business will be wrecked if this measure is not enacted into law. Too many other proposals which were "absolutely necessary" to prevent chaos have failed to become effective and yet most of the companies are still operating and getting along better than they were a year or so ago.

A better feeling pervades the gasoline market due to information from Washington to the effect legal questions which have prevented a number of large companies from purchasing three per cent of their gasoline requirements, as recommended by the Planning and Coordination Committee, are in a fair way to be ironed out this week and that these large companies will start buying this proportion of their gasoline requirements. Such action would remove from the gasoline market all distress material and stabilize that market.

Production of crude oil recorded a substantial increase during the past week, each of the major producing states showing a large gain. East Texas is bearing out predictions that when Congress adjourns, without passage of the oil control bill, the output there would be increased greatly. However, evidence is accumulating of thefts of oil, illegal practices, etc., and it is expected Federal operatives will exert every power they possess to bring hot oil producers to justice. The increase in Oklahoma is due merely to the practice of operators in the Oklahoma City Field of running their allowables early in the month. That field accounted for practically all the increase recorded in the state but this increase should be balanced later in the month.

Operations in the different fields continue at a high level. The test of the General Petroleum Corporation in the South Belridge Field in California is attracting especial interest due to the fact it is the deepest test ever drilled for oil and because the company has cored what is believed to be a sufficient thickness of oil sand from the bottom of the test to warrant the expectation it will be a commercial producer. The well now is 11,377 feet deep. The Cayuga Field in East Texas was extended a mile south by a well making 10 barrels an hour. The new discovery in Cherokee County, southwest of the town of Rusk in East Texas, is making some salt water.

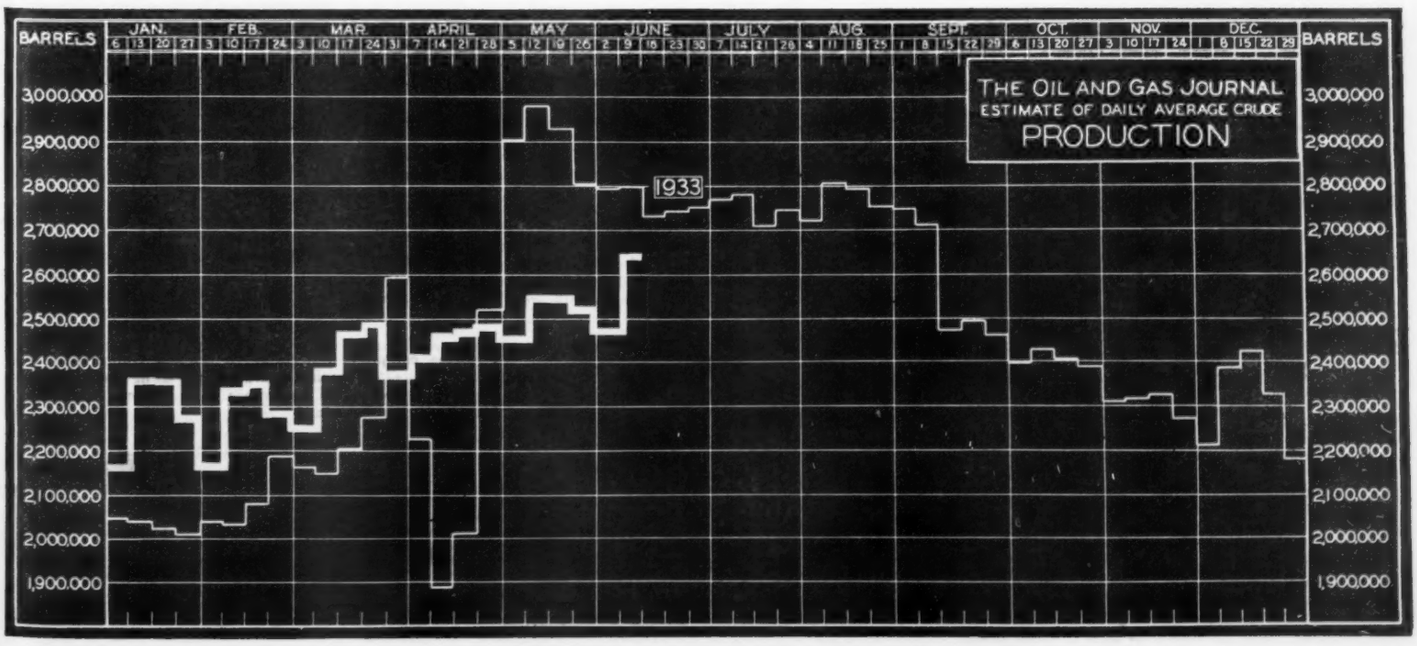
Operators on the Gulf Coast are again watching the Splendora section where a test made 94 barrels of distillate and 30,000,000 feet of gas at high pressure.

Crude Oil Production in the United States

Estimated daily average production for the week ending June 9, a comparison with previous week and the Federal allowables follow:

		Federal allowable	
Oklahoma—	June 9	June	June 2
Oklahoma City	228,310	.....	158,455
Seminole-St. Louis	93,485	.....	86,585
Remainder of State	227,140	.....	231,915
Total Oklahoma	548,935	511,700	476,955
East Texas—			
Lathrop	241,110	.....	220,420
Kilgore	175,260	.....	160,210
Joiner	156,350	.....	142,920
Total East Texas	572,720	.....	523,550
West Texas	138,465	.....	137,413
North Central Texas	89,735	.....	89,465
Texas Panhandle	54,811	.....	59,144
East Central Texas	51,850	.....	51,355
Gulf Coast—Texas	170,405	.....	172,262
Southwest Texas	47,144	.....	47,705
Total State of Texas	1,125,130	1,032,300	1,080,894
Kansas	127,195	130,300	132,125
North Louisiana	25,425	.....	25,310
Gulf Coast—Louisiana	65,815	.....	64,115
Total Louisiana	91,240	83,000	89,425
Arkansas	30,890	33,000	30,895
Eastern Fields (except Michigan)	101,250	108,900	100,750
Michigan	32,900	32,800	33,675
Rocky Mountain area	92,140	96,000	88,820
California—			
Santa Fe Springs	43,250	.....	40,250
Long Beach	69,250	.....	63,250
Mountain View	5,500	.....	6,750
Elwood	9,250	.....	10,000
Kettleman Hills	55,750	.....	58,500
Remainder of State	314,000	.....	279,250
Total California	497,000	500,300	458,000
Total United States	2,646,680	2,528,300	2,491,539

Increase 155,141 Bbls. Daily.



Demand for Lower Cost Highways Presents New Opportunity for Manufacturers of Asphalt

By C. O. WILLSON

Complaints regarding the wasteful expenditure of highway construction funds, the rumble of which has been heard at scattered points over the past two years, are now rapidly assuming the proportions of a roar. Reflecting the fact that the public is becoming more and more tax conscious as this burden steadily increases from all sides, investigations are being made as to the money spent in the construction and maintenance of improved highways. As the investigators in all parts of the country have checked these expenditures over the past few years against the tangible results, with rare exceptions, they have been amazed at the cost per mile of satisfactory highways now available for use by motorists.

To provide funds for the construction of these highways during the past 10 years over $3,000,000,000 has been collected in car registration fees. More than $3,500,000,000 has been obtained from these same motor vehicle owners in the form of Federal and state gasoline taxes. Hundreds of millions have been appropriated by the Federal Government to support National highway programs and many millions more have come yearly from the coffers of cities, counties and other government units. To secure the benefits of improved highway systems immediately many states have floated bond issues and these issues, with the money practically all spent, now total approximately $5,000,000,000. Thus during the past 10 years well over a billion dollars has been spent yearly in the effort to secure highways meeting the needs of people operating more than 23,000,000 motor vehicles. Except for the city car owners whose driving is confined to trips to adjoining cities connected by one or more of the so-called "Super Highways" which have absorbed a substantial part of funds available in many states, it is now apparent that these tremendous expenditures have failed woefully in accomplishing the objective of giving the taxpayers an adequate highway system.

Oil Business Position

It may be asked "Why should the oil industry get excited about these indications that the motoring and tax-paying public is at last realizing the extent to which it has been victimized in furnishing the wherewithal to carry out the various and sundry road construction programs which have been promulgated over the past 10 years?" The answer is that the oil business has far more at stake than any other industry and recent developments suggest opportunities for which the industry has been waiting for a long time.

In the first place it is now conceded by competent engineers and other technical experts that with the elimination of the wasteful practices which have been a part of the construction and maintenance work in the past, a satisfactory program could be carried out in the future with substantially less funds. Representatives of the oil industry, whenever they have endeavored to secure reductions in state gasoline levies or prevent increases, are always met with the official arguments usually emanating from the highway departments that "more funds are needed to build more roads" with the added contention over the past three years that the road work furnished employment for people who otherwise would be supported by public charity. This stock-in-trade argument has lost some of its value in many states during the past year due to the fact that large sums collected from motorists in gasoline taxes and registration fees have been diverted to other state uses.

It is needless to explain in detail here what these high taxes have meant to the oil industry. They are responsible for wide scale evasion by unscrupulous distributors and legitimate operators in meeting this competition have seen their prices slump to unprofitable levels constituting a problem which many consider the most serious now confronting the industry. From the standpoint of the gasoline consumers, the excessive taxes have offset the reduced costs of the industry which otherwise would have been passed on to them in the form of lower retail prices. This angle of the problem will become more apparent when prices are advanced to levels more in line with actual costs within the industry.

Reduce Taxes

Competent investigators are authority for the statement that gasoline taxes could be reduced to 2 or 3 cents per gallon in the states, with the Federal tax of 1 cent dropped, and there would be sufficient funds available to build new highways and maintain those already completed, provided the reduced funds were sufficiently administered. This in effect means that the oil industry can insist that the tax burden on its principal product be reduced and at the same time not suffer through a stoppage in the construction of suitable highways which are the "rails" of the motor vehicle.

In this connection emphasis is placed on the fact that from the standpoint of the oil industry all the small villages and towns and a large majority of the farms in this country are transportation units which will operate throughout the year provided all-year highways are available. It is agreed that in the past too much emphasis have been placed on the building of a few national and state highways connecting the main consuming centers. Too little attention has been paid to the so-called farm and market roads.

A recent investigation made in states west of the Mississippi River centering in Kansas City showed that if the money spent by these states in costly main highways had been spread out with less expensive roads, the mileage of hard surface roads which would be used throughout the year would have been trebled. If this had been done, cars and trucks owned by farmers and those residing in towns off the main highways, which are not now used by their owners due to impassable roads part of the year, would be buying gasoline every week of the year. Thus a more intelligent use of highway funds in the future will tend to increase the consumption of gasoline and reduce the large declines in the rural sections during the winter and spring months.

Situation in Illinois

Just what this development will mean in one state is shown in a recent article appearing in the Chicago Tribune summarizing the highway construction situation in Illinois. The article said in part:

"Farmers have a complaint that Illinois has more miles of dirt and mud roads than either Indiana, Michigan, Ohio or any of the progressive eastern states. This is due to sins of omission in the past. Illinois built miles of expensive concrete where a cheaper design and material adequate for traffic requirements would have doubled or tripled the mileage of secondary roads.

"The Chicago Motor Club estimates that $32,000,000 was wastefully spent on 1,609 miles of such lightly traveled routes. The $32,000,000 represents the difference between the cost of concrete and what the cost would have been with adequate, dustless, all-weather surface for these miles.

"The program for the future, it was learned, includes 150 to 200 miles of low cost bituminous treatment of state bond issue routes and many more miles of county highways. This will be the first time that a state bond issue route has been built with other than concrete, brick or asphalt with a concrete base. Almost all of these routes in the past have been of slab."

Enlarge Asphalt Demand

This statement of the situation in Illinois is typical of the findings of investigators in many other states and it also suggests the opportunity offered to the oil industry to increase the demand for one class of products which at present represent a small part of its total revenue. A highway construction program in the future based on the actual needs of motor vehicle owners not only means reduced taxes for those who foot the bills, with more instead of fewer all-weather roads, but it will also mean a widespread use of petroleum asphalts and road oils in the building of these highways.

While steady progress has been made during the past 10 years in promoting the use of petroleum asphalts in the construction of hard surface roads and the use of road oils in laying dust and improving lightly traveled highways, the manufacturers and distributors of these products have in many instances been discouraged because of their inability to secure a more general acceptance of their products. Many of the difficulties encountered have been of their own making and others are due to the tactics of their competitors who in the past have appeared to have an impregnable position. State highway departments and the Federal Government in the past have favored highways using concrete or brick construction. Where petroleum asphalt was utilized in the construction of these highways with their high costs per mile,

(Continued on Page 58)

Taxpayers Condemning Wasteful Highway Expenditures

As a result of the increasing number of investigations covering expenditures of highway and street departments an unusual opportunity is presented to the oil industry. More and more taxpayers are coming to realize that the funds which they have contributed over the past few years have been partially dissipated in various ways, the most important of which has been the construction of costly highways when less expensive surfacing would have given satisfactory roadways and greatly increased the mileage now available.

The oil industry is interested in this development from several angles. It may prove to be the opening wedge in the campaign to reduce present gasoline tax rates by making it possible for highway departments to construct more improved roads with lower total expenditures. More all-weather roads also mean greater gasoline consumption and finally the oil industry with its various grades of asphalts and road oils has the material for the construction of lower cost highways adaptable to requirements in all parts of the country.

Administrator's Report on Crude Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended June 2 totaled 343,121,000 bbls., an increase of 2,800,000 bbls. over the total of 340,321,000 bbls. on hand at the end of the preceding week, Harold L. Ickes, Secretary of the Interior and administrator of the code of fair competition for the petroleum industry, announced today. This material increase, which followed a decline of 1,073,000 bbls. during the previous week, comprised an increase of 3,001,000 bbls. in stocks of domestic crude oil and a decrease of 201,000 bbls. in foreign crude stocks.

Current reports of the industry indicate that crude oil production for the week ended June 2 averaged approximately 2,500,000 bbls. daily, a small decrease from the previous week. Total imports of crude were 649,000 bbls., as compared with 559,000 bbls. for the previous week. Crude runs to stills showed a material decline, the daily average for the week ended June 2 being 2,270,000 bbls., as compared with an average of 2,550,000 bbls. for the previous week.

CRUDE PETROLEUM STOCKS REPORTED BY COMPANIES HOLDING 100,000 BBLS. OR MORE

Grade of crude oil—	Stocks held by reporting companies May 26, 1934 (bbls.)	Stocks held by reporting companies June 2, 1934 (bbls.)	Change from May 26, 1934 (bbls.)
Pennsylvania Grade	4,758,000	4,822,000	+64,000
Other Appalachian, including Ky.	1,303,000	1,252,000	—51,000
Lima—N. E. Indiana—Michigan	1,605,000	1,613,000	+8,000
Illinois—S. W. Indiana	11,279,000	11,308,000	+29,000
N. Louisiana and Arkansas	10,861,000	11,008,000	+147,000
West Texas and S. E. New Mexico	28,918,000	29,340,000	+422,000
East Texas	41,931,000	42,171,000	+240,000
Other Mid-Continent	159,408,000	160,345,000	+937,000
Gulf Coast	15,609,000	16,389,000	+780,000
Rocky Mountain	27,685,000	27,785,000	+100,000
California	33,505,000	33,830,000	+325,000
Total domestic crude	336,862,000	339,863,000	+3,001,000
Foreign crude	3,459,000	3,258,000	—201,000
Total crude	340,321,000	343,121,000	+2,800,000

Dilatory Tactics Likely Successful in Preventing Passage of Federal Crude Oil Control Bill

By HUGH D. MALLON

Washington Bureau, The Oil and Gas Journal

WASHINGTON, D. C., June 11.—Passage of the Federal Petroleum Act at this session of Congress is becoming increasingly doubtful. It would seemingly take a miracle to put it through now. Representative Rayburn of Texas, chairman of House Committee on Interstate and Foreign Commerce, is regarded as hostile to this legislation and appears to be taking every opportunity to delay and hinder its enactment. The hearings on this bill were strung out from day to day, and no attempt was made to expedite the matter. When the hearings were concluded it was announced that a short hearing on the pipe line divorcement bills introduced by Representative Strong of Texas would be held. This hearing delayed consideration of the oil bill one more day, and since then the committee has been in executive session, but has given no consideration to the oil bill, and has taken no steps to report the bill. No date has been set for the committee to consider making a report, nor has any indication been evidenced that any date will be set in the near future.

Secretary Ickes, oil administrator, has said the bill could pass if Mr. Rayburn would get behind it. When he made this statement the administrator also said that when the bill was first brought to the attention of Congress Mr. Rayburn protested giving it to his committee, as he said it was already overloaded with work. Arrangements were then made to have the bill referred to another committee, and when it was apparent that another committee would and could handle the measure Mr. Rayburn reversed his previous stand and asked that it be referred to his committee, which was done.

In commenting on the bill, Secretary Ickes stated it was wanted by President Roosevelt, and that the President had sent two letters to the committee urging passage of this bill at this session, and stressing the chaos and distress which will result if it is not considered now. The administrator further declared that, contrary to statements attributed to Mr. Rayburn that Secretary Ickes was only "luke warm" towards the bill, he was vitally interested and concerned about this measure and wanted it clearly understood he was solidly in favor of it and had to have it if he was to wield any real control over the oil industry.

Speaking of the opposition, Mr. Ickes said: "Apparently 5 per cent of the industry, by making a loud noise, could defeat a bill approved by 95 per cent."

Fell Presents Rebuttal

Harold B. Fell, executive vice president of the Independent Petroleum Association of America, speaking on behalf of the association and 24 other organizations representing the major part of the independent operators in the United States, opened the rebuttal argument of the proponents of the bill. He advocated restriction of imports, and submitted a proposed amendment to Section 4 of the bill, the import section. The amendment would restrict permanently the importation of more petroleum, or its products, including natural asphalt, than was imported during the last six months of 1932. This was in the Thomas bill, which was introduced in the Senate by Senator Thomas of Oklahoma, but was changed in the Disney bill to allow the Secretary of the Interior to set the amount of imports after July, 1935.

Included in the statement of Mr. Fell was an estimate made by Ray M. Collins, formerly state umpire in Oklahoma, "that in the next 20 years the 54,000 stripper and semistripper wells (in Oklahoma) will produce 540,000,000 bbls. of oil, while the 3,580 flush wells will ultimately produce 425,000,000 bbls. of oil; there are between 15,000 and 18,000 men employed to operate the 54,000 wells, and only 10,000 men employed on the 3,580 flush wells."

Opposition Heard

Appearing against the bill, Jack Blalock, East Texas, claimed there was no necessity for the legislation now. He stated that the talk of 10-cent oil was greatly overplayed, as the previous 10-cent price was brought on as a punitive measure by one of the major companies to punish the independents in the East Texas area who had been fighting passage of an oil control bill in the state legislature. It was a form of politics of a purely local nature, and the Federal Government had nothing to do with the restoration of prices to a higher level, he said. Mr. Blalock mentioned, as another reason why this act is unnecessary, the prosperous condition of the industry. "This (the oil industry) is the most prosperous industry in America," he said.

Representative Joseph Bailey of Texas appeared against the bill, and began his remarks with the statement that the declaration of policy in the act was the major part of the bill; that if the adminisrator got this declaration of policy he would be more than satisfied. Mr. Bailey attacked the provision of the bill governing the development of new fields, declaring that under that section, and the plans which the administrator would approve for the development of new fields, unitization of oil fields was mandatory.

Also appearing against the bill, Representative Joe Eagle, from Houston, Tex., asked that the bill be laid on the table and no more consideration given it at this session. He said that the code would suffice until the next session of Congress, when more mature consideration could be given to legislation of this type. He also attacked the administration of the oil code, declaring the administrator and his assistants were not acquainted with the problems of the industry and were not competent to decide questions for the industry.

Only "Smoke Throwing"

Representative McFarlane, of Graham, Tex., gave his approval of the bill in no uncertain terms. He said the Railroad Commission of Texas had fallen down, that it was unable to enforce the law, and that a conservative estimate of the amount of "hot" oil from East Texas daily was 75,000 bbls. "These men have had their day of grace," he declared, "the Federal Government should now step in. If the Federal Government does not take hold now there will be 10-cent oil very shortly after adjournment of Congress." Arguments of opponents of the bill were referred to by Mr. McFarlane as "throwing smoke before you gentlemen to allow them to continue their present practices."

Hearings on the pipe line divorcement bills were limited to 35 minutes. They were held on June 8, when arguments of some of the proponents of the measure were heard. The hearings closed without the appearance of any witnesses against the bill and apparently the measure will not be acted upon any further at this session of Congress. Those appearing for the bill included Representative Strong of Texas, Representative Joseph Bailey, also of Texas, and W. G. Williams of Fort Worth.

Ickes Describes Tricks

Commenting on the report of Louis R. Glavis, director of investigations, after a recent trip to Texas, Administrator Ickes described some of the methods used by unscrupulous oil operators to evade state and Federal regulations, including portable refineries, trick valves which permit oil to flow out while apparently sealed and locked, pipe lines tapping wells below ground and other similar devices.

"These portable refineries, which skim the cream off the crude oil and waste 75 per cent of each barrel they handle, are cited merely to show the sort of thing our enforcement agents are up against," Mr. Ickes said. "They can be transported without great difficulty and moved miles away, ready for business when they hit the ground on a new site. The waste of oil by this type of refinery, which looks like a boiler on stilts and which produces gasoline by boiling the crude oil, is a more serious consideration than the amount of illegal production involved. Only from 15 to 25 per cent of the gasoline content of a barrel of crude is obtained by this boiling process and the rest of the barrel usually is lost.

"Profits are heavy for the operator, because the oil costs him virtually nothing, there is no labor expense, and his operating upkeep is about as near to zero as anything can be. If he can get

(Continued on Page 58)

Refinery Board of Review Acts Quickly on Appeals for Higher Allocations

By HUGH D. MALLON

WASHINGTON, D. C., June 11.—The Refinery Board of Review which met on the first Monday in June for the purpose of hearing appeal from refinery allocations, reported 36 appeals and rendered decisions on all of them.

Among the appeals which were received and decided by the board were requests for increases in the gasoline allowables from large and small companies, companies represented by members of the Planning and Coordination Committee, as well as companies represented by members of the board. Practically every refinery which has representation on the committee had appealed its allocation and in all but three instances these appeals were denied. In the allowances granted the figure asked for was cut down to a figure which the board felt should be adequate and at the same time just.

The list of decisions shows 21 denials, 13 increases allowed, and in two cases no decision has as yet been handed down. In only five of the allowances was the amount of increase asked for allowed. In the majority of other instances where an increase was granted the increase was only 50 per cent or less of the requested amount.

This initial record of the Board of Review shows that the board intends to act fairly and expeditiously. Where it is clearly shown that an increase of the allocation is necessary that increase is granted, but if no case is made out by the appellant the answer will be in the negative.

In hearing these 36 cases in the short length of time which it did the Board of Review and its staff worked day and night in getting the job done.

The list of appeals and the decisions in each appeal are as follows:

Docket No.		Refinery district No.	June allocations Bbls.	Increase requested Bbls.	Board Decisions
1	Dickey Oil & Refining Co.	4	24,746	11,254	Denied
2	Continental Oil Co.	4	358,126	21,874	Denied
3	Globe Oil Refg. Co.	3	123,150	58,850	Denied
4	Standard Oil Co. (Ohio)	3	281,817	30,183	Denied
5	Empire Oil & Refg. Co.	3	298,000	36,000	Denied
6	Barnsdall Refineries Inc.	4	184,656	35,344	Denied
7	Pan American Refg. Corp.	5-B	216,000	726,000	†Denied
8	Super Asphalt Prod. Co.	3	1,104	1,396	*1,396
9	Skelly Oil Company	4	291,935	42,000	Denied
10	Tide Water Oil Co.	4	193,141	56,859	*36,859
11	Cushing Refg. & Gaso. Co.	4	41,283	14,717	Denied
12	Taxman Refining Co.	5-A	29,460	10,540	Denied
13	Magnolia Petro. Co.	5-A	148,245	22,500	Denied
14	The Texas Company	5-B	1,323,000	229,400	*110,000
15	Phillips Petro. Co.	3	None	68,000	‡Denied
16	Phillips Petro. Co.	4	303,967	67,633	*29,823
17	Phillips Petro. Co.	5-A	386,460	85,240	*53,750
18	Deep Rock Oil Co.	4	120,459	51,541	*42,000
19	Mid-Continent Petro. Co.	4	398,656	42,560	Denied
20	Tucker Oil Co.	5-A	3,014	486	*486
21	The Pure Oil Co.	3	128,000	24,000	Denied
22	The Pure Oil Co.	2	159,400	36,600	Denied
23	The Ohio Oil Co.	3	140,000	40,500	*40,500
23A	Marathon Oil Co.	5-A	45,707	10,000	*5,000
24	Standard Oil Co. (Indiana)	3	1,474,000	164,000	Denied
25	Standard Oil Co. (Indiana)	4	340,206	113,794	Denied
26	Texas Co.	3	478,360	86,553	Denied
27	Amsco Refining Co.	5-A	7,627	1,698	Denied
28	Louisiana Oil Refg. Co.	6-B	359,377	26,771	Denied
29	Allegany Refiners Inc.	2	3,500	1,700	*1,700
30	Tri State Refining Co.	2	None	20,000	*20,000
31	Kendall Refining Co.	2	50,300	13,468	*6,734
32	New Deal Oil & Refg. Co.	5-A	1,276	1,224	Denied
33	Standard Oil Co. (Ohio)	2	253,400	16,600	*8,500
34	Continental Refg. Co.	2	5,200	2,551	No Decision
35	Southport Petro. Co.	5-A	27,550	32,450	No Decision

*Represents increase granted. †Plea for transfer of that part of allocation fixed for Humble by reason of processing agreement. ‡Appealed for allocation in District No. 3 by reason of blending operations.

Reconditioning Restores Twenty-Year-Old Well Almost as Good as When First Brought In

By ROBERT C. CONINE

OIL CITY, Pa., June 9.—After shooting with 15 quarts of nitroglycerin and cleaning out, a well on one of the hills of what is now the Wanango club golf links was brought in with a head of 10 bbls. a day, 25 years ago. Two weeks ago the same well, producing 6 bbls. of crude a month, was shot with 50 quarts and cleaned out. Today the well is still producing at a rate of 6 bbls. a day after coming in with a head not much lower than the initial output a quarter of a century ago. There are nearly 250 wells on this lease and of the dozen which have been reconditioned not one has failed to respond in a similar fashion. Production is from the second Venango sand at an average depth of approximately 700 feet below ground surface.

The operators of this lease have introduced air repressuring experimentally and the results have caused them to consider applying this method of secondary recovery throughout the large property. Future development will be carried out more systematically, with adherence as close as possible to pattern network arrangement of injection and producing wells. At the present time air is introduced into the second sand (which is sealed by means of cemented rag packers) through three abandoned wells which, so far as is known, have never been cleaned out. Since the use of air in these operations was started, those in charge of the lease have noted conditions in the light of air and gas repressuring development.

Slate fingers are an ever present nuisance for those who have applied secondary recovery methods in the broken sand areas of the Middle District, but in the second sand wells discussed above another factor to be considered is the gypsum sheets or shelves which are deposited across the bedding sealing off large sections of the productive sand. Bits of the sand shot out of the well show varying thicknesses of gypsum deposited by water from the upper strata. At Pennsylvania State College sand thus coated is the subject of considerable laboratory work.

Pioneering work in air repressuring presents many peculiar developments. One operator sought to drown out a stratum 24 inches thick by introducing water into the hole. This sand had been pumped for some 40 years and the vacuum, in the words of the operator, "would pull your hat down the hole." Part of the experiment was to observe how much water the sand would take before showing in another old well 80 feet away. After pouring a 5-inch stream of water into the sand for a month the operator decided that nothing short of the Allegheny River would suffice for the experiment, and he is still wondering where all of that water went. Another operator used an old well for air injection over a period of several months and then decided to recondition it and put it on the pump with the result that inside of three weeks this well became a producer.

Carbide Reconditioning

One of the largest operators in the Pennsylvania grade region reports good results in reconditioning old wells by the use of calcium carbide and water. A well treated with carbide after shooting with glycerin is said to release much additional caked paraffin and mud. Experiments carried out to date indicate the use of 300 to 500 pounds of carbide and a barrel of water for each 100 pounds of carbide. Herman J. Little, of South Penn Oil Co., says that after heating, agitation and bailing out operations have been completed the wells treated with carbide and water in most cases have shown exceedingly good recoveries in oil production over that usually recorded. An accompanying increase in casinghead gas is also noted.

On many of the leases in the Middle District the casinghead is left open and whatever gas is produced escapes into the air. The casinghead is left open to relieve back pressure on the producing sand. However, gas used on these leases costs 65 cents a thousand plus an additional 2 cents or so when the gas is delivered under higher pressures. For this reason particularly, those who have been repressuring have saved the gas from the sand by recirculating the surplus along with the injected air. A careful check is maintained to avoid an explosive mixture, as several air-gas lines have been converted into twisted ribbons. In the early stages of air repressuring of the oil-bearing sands there is little or no gas in evidence at the casinghead. After some time the gas makes its appearance and increases, usually, sufficiently to provide all of the fuel needed on the lease for all purposes, including heating lines in winter, and for recirculation underground as an aid to recovery. It has been found that in spite of all that has been written and said about Jamin action, etc., the gas does better work than air. It has been noted that where gas is recirculated the A.P.I. gravity of the oil has increased over a period of some five years by two or three points, and where air has been used alone the gravity dropped as much as five points.

Want $3 Price

The smaller producing companies, naturally, have higher producing costs than the larger companies, and the numerous operators working out small farms throughout the region have costs which by any calculation are prohibitive and can lead only to abandonment unless the price of Pennsylvania Grade crude oil is raised considerably above $3 a barrel. Students of the Pennsylvania region stripper well situation say that a price of $3 a barrel would rejuvenate the fields south of Bradford, however.

The operators of small leases in the Middle District, these observers point out, do not have bank or commercial credit; they are operating at a loss; the properties are run down and badly in need of repairs; the operators, as a rule, have little or no knowledge concerning basic facts about their sands, and they either do not know modern methods of secondary recovery, or are financially unable to develop their properties with these methods.

The high cost of operating small leases can be met by co-operation. Several property owners can pool their resources and operate on a system of unitization. In this way repressuring can be utilized where it might otherwise be prohibitive. One complaint which is heard much too often from those who have installed repressuring equipment is that neighbors will not co-operate. The unprogressive neighbors derive some benefit from the air and gas injected in adjoining leases and instead of modernizing their own operations they become a source of wasted energy for the progressive operators.

In some of the fields south of Bradford water flooding and air repressuring are being tried as a last resource. If these methods do not bring results it is certain that several large areas where cores indicate that considerable oil remains in the sand will be abandoned because of high production costs. It is understood that in some sections of the Middle District waivers of damages are being taken preparatory to experiments with water flooding.

Production Costs

The following production costs are for the year 1932, and to the unit cost, it is authoritatively said, should now be added 25 cents due to shorter hours and additional wages under the oil code:

District	Daily average production	Average cost per Bbl.	Total cost
Allegany	7,068	$2.37	$16,751.16
Bradford	24,224	2.37	57,410.88
Middle District	6,782	3.04	20,617.28
S.W. Penn'a	2,960	2.85	8,436.00
W. Virginia	11,874	2.85	33,840.90
	52,908	$2.59	$137,056.22

Adding the 25 cents the average cost per barrel for the region is $2.84.

The Bureau of Mines crude oil report by refineries has just been issued for April, and statistics from this and other sources relating to the Pennsylvania grade crude oil industry may be of interest. The following are daily average production figures for the six districts in the region: (week ending)

District	Apr. 7	Apr. 14	Apr. 21	Apr. 28
Allegany	7,750	7,250	7,250	7,750
Bradford	31,800	31,900	33,200	32,350
Kane to Butler	7,650	7,050	6,150	6,850
S.W. Penn'a	2,600	2,900	2,450	2,900
W. Virginia	10,650	11,900	11,800	11,350
S.E. Ohio	4,650	4,650	4,700	4,450

Production for the Pennsylvania grade crude oil region thus figures at 1,966,000 bbls. for the month of April. During that month stocks of Pennsylvania Grade crude oil, as reported to the oil administrator, dropped 141,000 bbls., and movement of Pennsylvania Grade crude oil to Atlantic Seaboard is estimated at 350,000 bbls. By weeks stock figures for Pennsylvania crude stood as follows: (week ending) April 7, 4,978,000 bbls.; April 14, 4,884,000 bbls.; April 21, 4,758,000 bbls.; and April 28, 4,837,000 bbls.

Bureau of Mines Report on Petroleum and Refined Products for April

According to reports received by the Bureau of Mines, Department of the Interior, the production of crude petroleum in the United States during April totaled 75,796,000 bbls. This represents a daily average of 2,526,000 bbls., an increase of 89,000 bbls. over the daily average in March, and 349,000 bbls. above April, 1933, when the East Texas Field was closed down for about two weeks. Nearly half of the gain in daily average output in April was recorded in Texas, most of the remainder in Oklahoma. Production in East Texas averaged 529,000 bbls. daily, the highest since September, 1933. All of the other major producing districts of Texas recorded gains in output in April. Daily average production in Oklahoma increased 25,000 bbls., 19,000 bbls. of which was recorded at Oklahoma City. Production in California and Kansas showed small increases in April, after material gains in March. The trend in production in other producing states was upward, only the Eastern states reporting decreases in daily average output.

Stocks of refinable crude continued to increase, totaling 354,350,000 bbls. on April 30, compared with 354,067,000 bbls. on April 1. Pipe line and tank farm stocks of crude, especially in Kansas, Oklahoma, and North Texas, showed the largest increase in April, in fact, most other classes of stocks declined.

The percentage yield of gasoline increased from 42.6 per cent in March to 43.6 per cent in April; this increase, together with the gain in crude runs, resulted in a material increase in the output of motor fuel. The total demand for motor fuel in April was 35,458,000 bbls., of which 32,735,000 bbls. constituted domestic demand and 2,723,000 bbls. was exported. The domestic demand figure is substantially higher than in March, 1934, and is 8 per cent above a year ago; on the other hand, exports were materially lower than in April, 1933.

The trend in motor fuel stocks, which has been upward since some time in September, 1933, was reversed in April when stocks declined about 600,000 bbls. Motor fuel stocks on April 30 totaled 65,608,000 bbls., of which 4,269,000 bbls. was natural gasoline.

The most important change in the statistics of the minor products was a material decline in the domestic demand for gas oil and fuel oil.

According to the Bureau of Labor Statistics, the price index for petroleum products during April, 1934, was 49.4, compared with 48.7 in March and 32.5 in April, 1933.

The refinery data of this report were compiled from refineries with an aggregate daily recorded crude oil capacity of 3,470,000 bbls. These refineries operated during April at 71 per cent of their capacity, given above, which compares with a ratio of 67 per cent in March.

E. B. GEORGE DIES

Edward B. George, 60, independent oil operator and drilling contractor of Tulsa since 1911, died last week. He had been ill four weeks of influenza and complications. He was widely known by oil men in Oklahoma, Illinois and Ohio.

He is survived by a son, R. L. George of Tulsa; a daughter, Mrs. W. I. Williams, Jr., Oklahoma City, Okla.; three brothers, Harry George, Tulsa; C. W. George, Pampa, Tex., and Emil George, Wapokoneta, Ohio; two sisters, Mrs. George Morris and Mrs. Adam Hubner, Wapokoneta.

Mr. George, a native of Ohio, entered the oil business in Lima. He operated in Illinois six years before coming to Tulsa. There he became associated with Isaac Shuler in operations in the Glenpool, Osage and other Oklahoma fields.

Rusk Is Center of Hottest Play in Many Years; Oil Men Crowding Cherokee County Seat

By L. E. BREDBERG

RUSK, Tex., June 11.—The New Birmingham Development Co. no doubt never had an inkling that some day, many years after it had abandoned its iron ore development project for which it was organized by a group of New Yorkers, that the land around Rusk, which it purchased in fee, would ever see hundreds of oil men and others gather in that little East Texas town to cause a frenzy such as it had never experienced in its many years of existence, and which it probably will never see again.

Everyone who has come to the town and area proclaims it the "hottest" oil play that has been staged in many years. The East Texas play, after "Dad" Joiner brought in the discovery, was much larger, but did not have the "temperature" that this new play has. Companies and independents are purchasing acreage and royalty miles from the well, playing a northeast trend through and around the town of Rusk, similar to a shore-line play. One geologist dubbed the area as having a "misplaced shore line," although there is supposed to be a good sized structure underlying the block of some 6,000 acres formerly assembled by the Shell Petroleum Corp., and on which the test of T. J. Wood, R. M. Young, Jr., Wolfe and others drilled the discovery well in the Levi Jordan Survey, approximately 6 miles southwest of the town of Rusk.

High Prices Being Paid

Royalty and leases are selling for what might now be considered exorbitant prices, but companies are not content to stand by and let the smaller operators get a foothold like they did in the East Texas Field, and consequently both groups are taking almost anything offered and paying plenty.

Companies have moved temporary offices into whatever place they could find open in this town of some 3,800 people, which is destitute of office and living quarters, and cramped for all the facilities and conveniences needed by the hordes that always swarm into a newly discovered area.

Rusk does not have room to accommodate the people, the majority of whom are staying in the nearby towns of Jacksonville, Palestine, Tyler and other places where they are not being "held up" for rooms and food such as they are in Rusk, where the natives are taking advantage of the boom to get as much as they can while the "getting is good." Jacksonville and Palestine are about 15 miles from Rusk, on paved highways, and Tyler is 41 miles north on the highway leading through Rusk, making it easy to commute between these towns and the center of the big play.

Rusk is the county seat of Cherokee County. It is located on the branch line of the Cotton Belt and on the old State Railroad, which is under lease by the Southern Pacific. Highways Nos. 40 and 22 pass through the town, the former from north to south, and the latter from east to west. There are two banks, the F. & M. State Bank and Citizens State Bank. There is only one small hotel, the Rusk Hotel, and a dreadful lack of rooming houses, with no rental houses available anywhere in the town. The town has a good water supply, but probably will not be able to supply the great influx of people unless it is enlarged. The United Gas System supplies the town with natural gas. There is no hospital and the town lacks adequate school facilities. The telephone and telegraph service has been the worst, but the Southwestern Bell Telephone Co. has already sent several crews in to string more lines and prepare for a still greater need for good telephone service out of the town to all parts of the State and into other states.

Crews that drilled Cherokee County discovery near Rusk, Texas: O. R. Hogue and J. R. Shepherd, drillers; Pete Killingsworth, T. R. Rowe, O. E. Moore, W. F. Youngblood, P. L. Bennett, W. A. Adams, J. S. Shinn, Pierce Keys, Hugh Carmichael and W. A. Clifton

Supply Houses Available

Supply houses can easily serve the new field from stores already located or planned for Palestine, which has been getting a boom and been headquarters for operators buying leases and operating in the southern tier of East Texas counties since the Long Lake Field of southwest Anderson County was discovered last September. Palestine is served by several paved highways and is a railroad center, therefore is in better position to serve the supply houses than Rusk can hope to be. Such location of supply houses would also serve the Cayuga Field in northwest Anderson County, and the gas area recently opened south of Turlington in Freestone County, about 25 miles distant.

The discovery well 6 miles south of Rusk in Cherokee County, Texas

A graveled and sandy road leads southwest to the discovery well from the town, but "one way" weakly constructed wooden bridges are a menace to truck and automobile travel.

The area is thickly wooded and rolling, the ravines and creeks and other low lying parts of the terrain offering plenty of obstacles to trucking in material for operations, and the dense underbrush and big trees calling for much clearing work before drilling operations can be started on a well.

30 Days to Drill Well

Thirty days' drilling time was consumed in drilling the well to its present total depth of 5,120 feet, and but for the determination of one man interested in the test, it would have been given up at the contract depth of 5,100 feet, without coring the oil sand and showing for a discovery. He elected to carry it on down, personally, receiving a little more interest in the 160-acre tract on which it was located, for drilling deeper. The tract was supposed to have 160 acres in it, but after resurveying it was found to be several acres short, which is causing a controversy between the operators and the Shell Petroleum Corp., holding up testing the well, according to authentic reports.

Mr. Wood was given six 160-acre tracts in the big Shell Petroleum Corp.'s block for the drilling of the test to 5,100 feet. Mr. Wood in turn made a deal with the drilling contractor, Roger Wolfe of Tyler, for drilling the well. They have since sold one 320-acre tract near the well for a consideration of $1,000 per acre in cash and $1,000 per acre in oil. Another 80-acre tract near the well was sold to the Texas Co. for the same consideration.

17 Feet of Sand Cored

The contractor reports that 17 feet of sand was cored, but that only 2 feet of sand recovered. The oil tests 40 degrees gravity, and is of the same texture as the East Texas Field oil, green in color. It will bring the same price, $1 per barrel. The Texas Pipe Line Co. now has a combination 4 and 6-inch line tied into the well from its North Texas Gulf Coast line that runs 3 miles north of the well. Three Black, Sivalls & Bryson 1,000-bbl. tanks are connected up, and a 4 by 16 National separator installed and ready when a test is made on the well.

A standard 120-foot East Texas pine wood derrick is over the hole in which a string of 24-pound Pittsburgh seamless 7-inch pipe was cemented at 5,112 feet, casing off a part of the upper sand that was thought to contain considerable gas. A 10 by 10 Union Tool Co. engine (one of the first manufactured) was used in the drilling, four 100 horsepower Broderick boilers supplying the power. Merrit Tool Co. and Fitzgerald and Hawthorne bits, including three Hughes cone rock bits, were used in cutting through the formations. The drawworks were manufactured by the Union Tool Works and a Lucey 12,000-pound pump handled the mud and water.

Below 3,000 feet drilling was hard, the easiest drilling being the chalk, but the contractor experienced no difficulty in drilling the hole and therefore was able to put it down on the $13,000 received from the Humble Oil & Refining Co. for a spread near the well.

Gray Tool Co. connections (built with

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Training School at Tide Water Oil Refinery Finds Favor With Management and Plant Employes

In 1925 the management of the Tide Water Oil Co. recognized the potential benefits of a training school at the Bayonne, N. J., refinery. The plan was discussed with the employes of the plant, through the medium of the plant works council, and the proposal met immediate favor from the majority of the personnel. Since that time over 700 Tide Water employes have taken advantage of the opportunity to secure special training in one or more phases of refinery operation. On May 8, in graduation exercises attended by company officials, 75 employes received certificates showing that they had completed courses offered over the past year.

Anyone familiar with refinery operating practices over the past two decades will appreciate immediately the change in attitude on the part of employes in taking advantage of a training school, which in effect does away with the supposed secrecy of operating characteristic of the first half century of petroleum refining and makes modern operating methods familiar to all employes sufficiently interested to complete the training courses available. Petroleum refining until a few years ago was carried on as a mysterious art although operations were relatively simple when compared with present day practices. Plant processing consisted largely of several distinct and separate operations in the hands of individuals who spent a substantial part of their time making sure that no one else in the plant became familiar with their supposed skill as operators.

The stillman, treater, pipe fitter, boiler fireman, grease maker and others, all had their "tricks of the trade" which they carefully guarded. For instance, the stillman learned by the trial and error method just how far to crack a steam valve in batch still operations and guarded this detail of operation so far as other employes were concerned. If the latter tried the same operation they usually puked a still and played hob generally with the plant operation.

It is needless to state that this method of operation has had no place in the picture with the coming of the more complicated methods of refinery operation since the World War. The Tide Water management has found that the training school has aided materially in bridging the gap between the individualistic refinery arts of the past to the correlated operations of the present in which the efficiency of the entire plant is the main objective.

Keeping Pace With Progress

From the standpoint of the employes, the school has made it possible for many to keep pace with the rapid changes in refinery processing. A majority of the refinery employes have been with the company in excess of 15 years. Many of the older employes would not have been able to continue to hold responsible jobs at the refinery had it not been for the training made available for them in the plant school. The stillman who started in the days of batch still operation has continued on the job through the continuous shell still operation to the tube stills of today with their large increases in capacity, higher temperatures and pressures, automatic control through instruments and other features of the modern distillation unit. The treater who threw chemicals in an open agitator now operates and understands the modern closed type treating units. The same situation is found in the other operating divisions in which the more or less rule of thumb methods of the distant past have been replaced with an operating procedure having a highly technical as well as practical background. For the younger men the school has given the opportunity to learn the practical phases of Tide Water operation in a relatively short period of time and thus qualify them for the jobs which became available from time to time in the form of promotions.

Modern Refinery Practice Requires Trained Men

Refinery operators over the past few months have come to realize as never before the desirability of having employes capable of taking over new work—usually involving more responsibility—on short notice. Many operators had difficulty in finding men in their own organization or on the outside who were sufficiently familiar with the various phases of their plant operations to take over new jobs made necessary by the shorter hours and increased employment under the N.R.A. code of the oil industry.

Modern refinery equipment represents large expenditures and its efficient operation requires special training on the part of those holding responsible positions. It is obvious that the company which has trained employes available at all times has a guarantee of efficient plant operation not obtainable in any other way.

The Tide Water Oil Company has found that a training school maintained by the management over a period of several years provides a satisfactory solution to many of the industrial relations and personnel problems with many mutual benefits to employer and employe. The accompanying article explains many of the features of the school located at the company's Bayonne, N. J. refinery.

Aided NRA Application

If the management had any doubt as to the desirability of the training school, it has been dissipated over the past eight months. Along with all other refineries in the United States those in charge of operations found it necessary under the oil industry's NRA code with its 36-hour week to place new men in the responsible operating jobs. In the case of the Tide Water refinery, the transition to the shorter hour week has been relatively easy. Many were already trained for their new jobs before the shorter hours became effective. Others through the facilities of the school were given quick training and were able in short time to handle their new work in a satisfactory manner, having already covered the ground during their school courses.

The management had realized the operating benefits of this character in the matter of vacations and enforced layoffs due to illness and other causes. All employes of the refinery with more than one year's service are allowed one week's vacation yearly and those with more than five years' service are given two weeks. The fact that trained men are available has made it possible to give these vacations without any sacrifice in operating efficiency.

Training for Salesmen

Although the primary purpose is to train plant employes, the work of the school has been gradually extended to include salesmen and general office employes of the company. Evening courses have been available and many employes connected with the main office in New York City have attended. For instance, an assistant purchasing agent of the company has taken all the courses offered and in this manner has gained a direct knowledge of refinery equipment and materials which has been of great aid to him in his particular line of work.

The sales and marketing course covers a complete study and analysis of the various products manufactured and marketed by the company. This gives a salesman an accurate and comprehensive knowledge of the company's products from the standpoint of quality, methods of manufacture and utilization. It has been found that this training is invaluable to those engaged in marketing. Under the direction of the school, dealers and jobbers handling Tide Water products are often brought to the plant for brief instruction covering the products in which they are particularly interested.

Directed by Supervisor

The training course is headed by a supervisor who devotes his entire time to this work. This man formerly was a still operator and is thoroughly conversant with the various phases of plant operation and is also familiar with the problems of the employes. The latter is an important factor in securing and maintaining the interest of employes in the school. The supervisor of the school conducts several of the classes assisted by other employes. These instructors in most cases are engineers connected with those phases of operation in which they serve as teachers. These men are paid by the management which provides for all the expenses of the school.

The school term starts the middle of October and ends the latter part of April. The objects of the school and the courses available are made known several weeks in advance through bulletin announcements and the Bayonne refinery plant paper, called the "Refinery News," which is published monthly. Plant foremen also co-operate in enlisting students. In many cases the foremen recommend courses to men under them. While it is necessary to complete an entire course and take an examination before certificates are given, employes are permitted to take part of a course if they desire and stop when they have completed that part of the work in which they are particularly interested. As explained by the supervisor, "the aim of the school is to adapt itself to the requirements of the refinery" and its work is sufficiently flexible to take care of any special situation in regard to training that develops from time to time.

One class period of one and one-half hour duration is held weekly. Employes can take more than one course if they are able to carry on the work satisfactorily, and several men have completed all the courses offered over a period of two years. Classes for shift men are held at 2 p.m. and 4 p.m.; day men at 4 p.m. and members of the clerical and technical departments at 4:30 p.m.

At present four courses are available to plant employes. These courses are briefly described in the following paragraphs.

Process 1 and Process 2

In these two courses the employes are given a complete picture of the various processes carried on in the manufacture of petroleum products, i.e., from crude oil to refined gasoline, lubricants, and the various other products. In addition to the test book work and classroom lectures and discussions, the instructors with the students make periodic visits to various units in the plant in order that they may inspect the equipment in which the products are manufactured and the method of manufacture. Such visits are timed to tie in plant operation with each phase of the studies being carried on in the classrooms.

Process 1 deals with the history of the company; the origin, production and transportation of petroleum; principles of distillation; methods of testing petroleum products, and a study of fractionating equipment in the distillation of various crude oils, gas recovery and cracking operations.

Process 2 covers the purification of petroleum products; refrigeration and dewaxing operations; sweating; filtration; compounding and blending, and grease manufacture.

Process 1 and 2 are conducted at separate periods and employes wishing to acquire full information regarding refining operations may enroll in both sections.

Power Plant Engineering Course

The power plant engineering course covers studies in the mechanical make-up and maintenance of steam boilers and engines. While studying the operation of this equipment, the students visit the various boiler houses and power plants in the refinery and secure first hand information and practical experience as to the methods followed in this work.

As a result of the knowledge gained in this course, the studens are prepared to take the state examination for steam licenses and thereby qualify themselves to step into engineering positions of all types as they become available.

Fuels and Firing Course

A short course of eight weeks dealing with various fuels used at the refinery and the type and construction of burners is carried on. The purpose of this course is to give operators a better idea of the importance of efficient firing of stills, coils and boilers. Particular emphasis is given to the effect on yields and maintenance cost as a result of inefficient firing methods.

While the above courses represent the standard types of instruction available in the school at the Bayonne refinery of the Tide Water Oil Co., nevertheless, the school supervisor and the management, in co-operation with the employes, are constantly alert to inject any new courses into the school which they feel will be of mutual benefit to the men and to the company.

L. H. LAPHAM DIES

NEW YORK, June 11.—Lewis H. Lapham, former chairman of the board of the Texas Co., died Sunday at the Columbia-Presbyterian medical center. Mr. Lapham, who was 76 years old, had been operated upon last Wednesday.

Mr. Lapham was the senior member of what was generally known as the "Lapham group" in the Texas corporation. A son, John H. Lapham, resigned as chairman of the executive committee last April.

Total Demand for Gasoline Continues to Increase Despite Large Decrease in Motor Fuel Exports

By C. O. WILLSON

The total demand for gasoline at refineries in United States continues to show a substantial increase over the same period in 1933 despite a large decrease in exports, according to reports of the Bureau of Mines announced last week covering operations the first four months of this year. As shown in the accompanying table, the total demand for motor fuels (domestic demand plus exports) for the four-month period ending April 30 was 7.3 per cent greater than the same period last year. For the first three months of this year the gain was 6.8 per cent greater. In establishing this favorable record for the four-month period, it was necessary for the domestic demand to offset a decline in exports amounting to 876,000 bbls. or 8.6 per cent. This was done with a gain in domestic demand of 8.8 per cent. The domestic consumption continues to point to an all-time peak this year being slightly in excess so far of 1930 which was the year with largest domestic demand for gasoline in this country.

The demand for the other principal refinery products is also running well ahead of last year. In the case of kerosene the gain in demand the first four months was 23.5 per cent, brought about by a phenomenal increase of 26.8 per cent in the domestic demand and 9.1 per cent increase in exports. The gains in the case of gas oil and fuel oil and lubricating oils were not as great as earlier in the year. The increase in the total demand for gas oil and fuel oil for the four month period was 12.9 per cent which compares with the gain of 15.1 per cent for the first three months. For the first quarter the gain in lubricating oil demand was 30.6 per cent but for the first four months this increase had flattened out somewhat with a gain of 22.5 per cent.

Wax is the only product listed in the government report which has shown an unfavorable situation when compared with 1933. The domestic demand for wax as reflected in refinery shipments, fell off 4 per cent and the export demand 19 per cent for the first four months. Stocks on April 30, however, were well under the same period in 1933 due to the heavy withdrawals during the latter part of 1933.

Based on the government data, the supply and demand for crude oil the first four months were in balance with practically the same gains in each when compared with 1933. The demand for crude oil increased 20,029,000 bbls. the first four months of this year, but this was offset with an increase of 22,201,000 bbls. in supply. The domestic demand for crude oil increased 17,605,000 bbls. and the foreign demand 2,424,000 bbls. Stocks of refinable crude oil on April 30 due largely to increases during the summer of 1933 were 5.8 per cent greater than on the same date in 1933.

Due to the heavy demand for some of the refinery products the statistical situation is relatively better when total all oils are considered than when only the crude oil situations are compared. As shown in the table, the supply of all oils increased 22,094,000 bbls. the first four months of 1934 over the same period in 1933, while total demand for all oils increased 35,050,000 bbls. This was brought about by the much larger demand for gas oils and fuels which necessitated substantial withdrawals from storage. Due to this development total stocks of all oils on April 30 were practically the same as on April 30, 1933.

The stock situation in the case of motor fuels shows a 9.3 per cent gain over April 30, 1933, despite the large increase in demand reflecting the fact that refiners on the production side have more than kept pace with the increase in consumption. The heavy demand for kerosene, gas oil and fuel oil and lubricants starting last fall has resulted in a situation in which inventories were lower on April 30 than the same date of the previous year. Production of kerosene was increased 10 per cent the first four months and in the case of lubricating oils 20 per cent.

From the standpoint of stocks, gas oils and fuels occupy the strongest relative position with a decrease of 17,928,000 bbls. when compared with the year previous. Despite a 7.3 per cent increase in crude runs to stills production of these products at refineries increased only 3.2 per cent.

Crude Oil and Refinery Situation Summarized—First Four Months of 1934-1933

Supply and Demand—Crude Oil (Bbls.)

	Total supply	Total demand	Excess Demand	Excess Pct.	Domestic production	Imports	Domestic demand	Exports	Stocks refinable crude April 30
1934, first 4 months	299,856,000	300,900,000	1,044,000	.3	288,770,000	11,086,000	289,577,000	11,323,000	354,350,000
1933, first 4 months	277,655,000	280,871,000	3,216,000	1.2	265,642,000	11,913,000	271,972,000	8,899,000	336,499,000
Increase, 1934	22,201,000	20,029,000			23,128,000	†827,000	17,605,000	2,424,000	17,851,000
Increase, 1934	8%	7.1%			8.7%	†7%	6.4%	27.2%	5.3%

Supply and Demand—Refinery Products—Motor Fuel (Bbls.)

	Total supply	Total demand	Excess Demand	Excess Pct.	Domestic production	Imports	Domestic demand	Exports	Stocks April 30
1934, first 4 months	133,269,000	126,955,000	†7,313,000	†5.7	133,268,000	1,000	117,727,000	9,228,000	‡61,339,000
1933, first 4 months	124,218,000	118,329,000	†5,889,000	†4.9	124,214,000	4,000	108,225,000	10,104,000	56,104,000
Increase, 1934	9,051,000	8,626,000			9,054,000	†3,000	9,502,000	†876,000	5,235,000
Increase, 1934	7.3%	7.3%			7.3%		8.8%	†8.6%	9.3%
Kerosene									
1934, first 4 months	17,691,000	19,426,000	1,735,000	10	17,691,000		16,271,000	3,155,000	4,822,000
1933, first 4 months	15,977,000	15,721,000	†251,000	†1.6	15,977,000		12,830,000	2,891,000	5,230,000
Increase, 1934	1,714,000	3,705,000			1,714,000		3,441,000	264,000	†480,000
Increase, 1934	10.7%	23.5%			10.7%		26.8%	9.1%	†9.1%
Gas Oil and Fuel Oil									
1934, first 4 months	109,372,000	129,506,000	20,134,000	18.4	105,155,000	4,217,000	120,299,000	9,207,000	106,041,000
1933, first 4 months	105,917,000	114,650,000	8,733,000	8.2	100,348,000	5,569,000	108,262,000	6,388,000	123,969,000
Increase, 1934	3,455,000	14,856,000			4,807,000	†1,352,000	12,037,000	2,819,000	†17,928,000
Increase, 1934	3.2%	12.9%			4.7%	†24.3%	11.1%	44.3%	†14.5%
Lubricating Oil									
1934, first 4 months	8,537,000	8,771,000	234,000	2.6	8,537,000		6,036,000	2,735,000	6,796,000
1933, first 4 months	7,113,000	7,158,000	45,000	.6	7,113,000		4,493,000	2,665,000	8,330,000
Increase, 1934	1,424,000	1,613,000			1,424,000		1,543,000	70,000	†1,534,000
Increase, 1934	20%	22.5%			20%		34.4%	2.5%	†18.4%
Petroleum Wax (Lbs.)									
1934, first 4 months	187,810,000	164,880,000	*22,930,000	*13.9	168,280,000	19,530,000	93,301,000	71,579,000	91,763,000
1933, first 4 months	146,977,000	185,678,000	38,701,000	26.3	138,880,000	8,097,000	97,198,000	88,480,000	124,927,000
Increase, 1934	40,833,000	†20,798,000			29,400,000	11,433,000	†3,897,000	†16,901,000	†33,164,000
Increase, 1934	27.9%	†11.2%			21.1%	14.1%	†4%	†19%	†26.5%

*Excess supply. †Decrease. ‡Revised method includes gasolines at refineries, bulk terminals and pipe lines. Note—Total supply equals domestic production plus imports. Total demand equals domestic demand plus exports. Data on demand for refined products are based on refinery shipments.

Crude Oil Runs to Stills and Total All Oils (Bbls.)

	Total crude to stills	Nat. gasoline production	% Gasoline yield from crude oil‡	Total supply all oils*	Total demand all oils*	Stocks all oils April 30
1934, first 4 months	283,352,000	11,764,000	45.8	316,523,000	328,941,000	589,795,000
1933, first 4 months	263,941,000	10,864,000	46.1	294,429,000	293,891,000	588,647,000
Increase, 1934	19,411,000	900,000		22,094,000	35,050,000	1,148,000
Increase, 1934	7.3%	8.3%		7.5%	11.9%	.2%

*Total all oils includes crude oil, refined products, natural gasoline and benzol. †Decrease. ‡Includes natural gasoline blended at refineries. All data based on Bureau of Mines reports.

Vapor Pressure Wooden Tanks Are Being Used Extensively to Handle Sulphur Bearing Oils

By L. G. E. BIGNELL
Petroleum Engineering Editor

When crude oil was first commercially produced it was barreled and shipped in that form of container direct to market. It is reported that the original Drake well at Titusville, Pa., produced, by the use of a tin pitcher pump, "several barrels" of oil during the first morning of its producing life, the pump being operated by the sons of "Uncle Billy" Smith the driller who completed the hole. This practice of pumping oil into barrels direct from the well was common at all of the earlier small wells, but as larger wells were discovered and they flowed naturally it became necessary to erect larger containers and the local conditions resulted in the use of wooden tanks.

The original oil wells were drilled in a country that was close to timber and the old-time wood workers were skilled in forming all manner of things out of wood. The first oil tanks were of the tapered stave type without deck, or with only a light board deck that merely served to keep foreign material from falling into the oil.

These tanks had flat hoops and while some iron tanks were used in the oil fields 50 years ago the general containers for oil at the lease were wooden tanks. When large wells were encountered it became common practice to set up "gun-barrel" flow tanks. These tanks were of smaller diameter than the lease storage tanks but much higher. One common size was 8 feet diameter by 16 feet high. The oil and gas direct from the well flowed into these gun-barrels and after the gas had escaped into the atmosphere the oil was drawn off at some point higher than the top of the lease storage tanks and run by gravity to the tank battery.

To break up the mist of oil and gas sometimes produced by the well many ingenious types of baffles were introduced into these gun-barrel tanks. Where the well made water in addition to gas and oil it was common practice to equip the flow tank with a siphon drawoff to control the water level.

With this arrangement the body of oil was floated on the water and allowed to accumulate at a level above the height of the stock tanks. The gas occupied the upper portion of the receiving tank and a wooden stack built into the deck permitted the gas to escape freely to the atmosphere.

Early Improvements

The escape of large volumes of gas from these stacks caused an accumulation of heavy vapor around the tank battery, especially when there was falling barometric pressure preceding a thunder storm. Lightning has caused many gas and oil fires under such conditions and it became necessary to provide some sort of protection against such hazards.

In the stack of the gun-barrel flow tank it was common practice to install a flap valve that could be manipulated from the ground by means of a long wire or rope tied to the flap lever. By closing this flap it was possible to cut off the major portion of the gas from escaping to the air and then if the well were closed in during the period of danger from the storm comparative safety was assured.

The decks of the stock tanks were also covered with a double layer of shiplap with tar or other type roofing paper between the lumber courses to make the tanks somewhat gas tight and prevent free escape of gas to the atmosphere from the tank top. The flow line into the stock tank usually terminated in a turned down nipple placed over a hole cut in the deck and the oil splashed into the tank and such gas as accompanied it flowed up through the hole to the air.

Many early operators observed that a tank of fresh oil would lose several inches of oil after standing for 24 to 48 hours and to stop this loss tank heads were provided that were crozed into the staves and made of matched planks so that they were reasonably gas tight when in place.

All of these tanks were of the tapered stave type with flat hoops and when first set they were as likely to leak at the stave joints as not. Old-timers preferred a second hand wood tank to a new one because the staves and bottom were soaked with oil and they could be set much tighter, so far as seepage of oil was concerned, than the new tanks.

Battery of vapor tight water sealed wooden tanks in Big Lake Field, Reagan County, Texas

The tank staves were made of cyprus or redwood and the bottoms of white pine and when heads were inserted in these tanks they were made of either white pine or redwood according to the local conditions.

Steel Tanks Become Popular

About 1919 with the increased activity in drilling for oil in the Mid-Continent fields the use of the bolted steel tanks increased. In the Ranger district during the early part of 1919 the change in use of the different type tanks was recorded as follows:

	Wood	Steel
January, 1919	90%	10%
February, 1919	80%	20%
March, 1919	70%	30%
April, 1919	60%	40%
May, 1919	50%	50%
June, 1919	40%	60%
July, 1919	30%	70%
August, 1919	20%	80%

This transition from wooden to steel tanks was brought about by many conditions but perhaps the principal one was the time element. To set a good tight wood tank required an experienced tank builder and crew and took a day and a half time to erect a 1,600-bbl. tank, the number of men capable of doing this type of work was limited. Therefore the number of wooden tanks that could be furnished in a given time was limited.

On the other hand it did not take long to convert farm hands and other field workers into "tankeys" who could erect tight bolted steel tanks. And they were hired by the hundreds and as the records show were soon setting more steel than wood tanks. Wood tanks continued in favor for gun barrels and water tanks both for the steam drilling rigs and for water cooling systems at natural gasoline plants and other places.

While the steel tanks are still popular and largely used in all oil fields both in this country and abroad for the handling of oil on leases it has been found that in some areas corrosion has been very rapid and deterioration of the tank complete so that many different kinds of metal have been used for the fabrication of tanks handling high content sulphur oils and gas.

The results have been variable and when all elements entering into the problem have been considered it has been found that no economical substitute for sheet steel or wrought iron tanks is available. This does not mean that metals are not available but usually their costs are high or some detail of fabrication difficult and it has been found in many instances that it was cheaper in the long run to buy heavy gauge bolted steel tanks and permit them to corrode to destruction.

Deck Corrosion

It has been clearly demonstrated that hydrogen sulphide will combine quite freely with the iron on the under side of deck sheets of steel tanks and form an iron sulphide scale that in time breaks away from the deck and falls to the bottom of the tank and sets up an active corrosion condition where the scale rests on the steel bottom.

Many ideas have been suggested to overcome this trouble and one that has proven quite practical and economical is to cover the steel tank with a wooden top or deck. This replaced the iron and therefore prevents iron sulphide scale from being formed and the life of the balance of the steel tanks is appreciably lengthened.

These wooden decks are fabricated in several ways. The Drane Tank Co. of Tulsa, one of the pioneer tank building firms to engage in this kind of work in West Texas, cut decks from redwood lumber to fit inside the shell of the tank. This deck is supported on dead wood and the uprights are doweled with wooden pins so that no metal is exposed to the corrosive gas or oil.

The usual strip gasket is used on the chime of the side sheet and then a layer of tar-paper is laid to cover the redwood deck and extend to the outer edge of the chime above the rubber gasket.

Over this is next laid one thickness of selected shiplap and ⅜"x2" bolts are used to bind the shiplap, tar-paper and gasket to the metal chime of the tank.

There are other variations of this general idea and this type of tank deck if properly installed upon steel side sheets will add materially to the life of the bottom and sides of the steel tank. The deck may be fitted with gas tight fixtures and reasonable pressures maintained within the tank if desired to retard evaporation losses from the oil.

Wooden Vapor Tight Tanks

Several of the leading tank companies are now making very carefully designed wooden tanks that are supplied with a tight deck and fitted with gas tight fixtures that will permit of holding as much pressure on the oil as necessary to prevent evaporation.

These tanks, however, are not to be confused with the old tapered stave tanks of the past. The new tanks have straight or bowed sides and might more properly be designated as "vats" than tanks. They are being built in all sizes from 60 up to 2,000 bbls. capacity and are rapidly winning favor on leases where sulphur oils are produced.

The wooden tanks are not built to take the place of the regular steel tanks for ordinary field service but have been developed exclusively for corrosion fields. They are used to handle the gas, oil and water direct from these wells and to store oil on the leases preparatory to the pipe lines removing it.

The specifications for a typical tank of this kind are somewhat as follows: Deck and bottoms made of air dried California redwood irrigation grade selected from No. 1 heart common with normal thickness of 2 inches. Staves also made from air dried California redwood clear all heart tank stock grade with normal 2-inch thickness. Vertical supports, deck stringers, column bases, cap plates and wind break all made from No. 2 common grade air dried California redwood.

Hoops for these tanks are usually made out of three-fourths inch diameter round steel bars and tightened with turnbuckles. Some builders prefer seven-eighths inch round iron for the lower hoops and five-eighths inch size for the upper hoops.

The staves are usually provided with grooves in the matched edges into which water seeps from the water seal that is maintained on the top of the deck. These water grooves are one-quarter inch deep and "V" shaped so that when matched they form a one-half inch diamond shaped vertical trough from the water seal on the deck to near the bottom of the tank. This water seal prevents the staves from drying out and oil and gas from escaping from the tank.

The tanks are fitted with noncorrosive fixtures some made of aluminum and other parts made of cast iron, but whatever kind of metal is used the fixtures are fastened to the tank by some method that does not expose iron or steel bolts to the corrosive action of the sulphur oil and gas or the water.

Some tank staves are slightly curved so that when the tank is completed it resembles a well formed barrel. Other tanks have perfectly straight staves and the sides of the tanks are vertical when the staves are in place. While there are arguments in favor of either type the general idea is much the same, and that is to provide a good substantial tank with tight bottom and head that will present no metal parts to the fluid or gas contained in the tank.

Water Sealed Tops

As the area in which the worst form of corrosion is experienced, West Texas and the Panhandle, is a very arid region

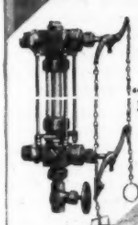
(Continued on Page 57)

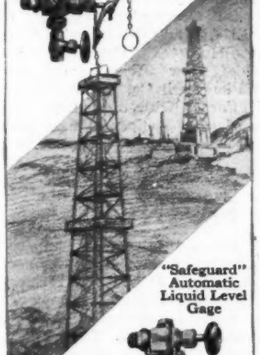
PENBERTHY LIQUID LEVEL GAGES

MEET ALL OIL INDUSTRY NEEDS

Automatic Injector

Ejector, Syphon or Jet Pump


"Navy Type" Liquid Level Gage



"Safeguard" Automatic Liquid Level Gage

"All-Iron" Automatic Liquid Level Gage

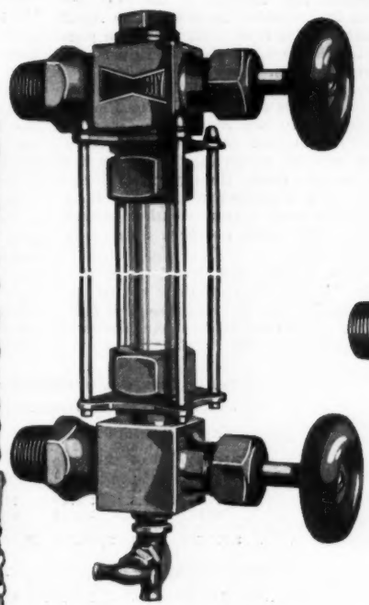
Gas Engine Lubricator

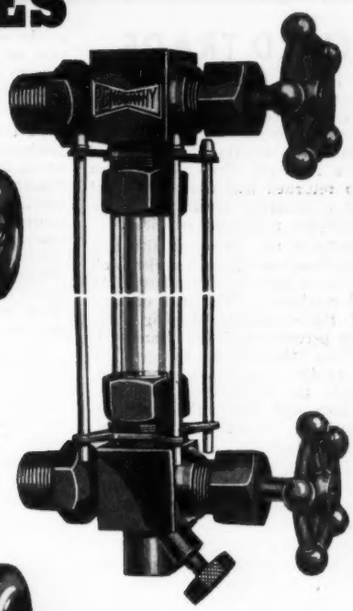
Snap Lever Oiler

Plain Brass Oil Cup

Plain Compression Grease Cup

"NAVY TYPE"
350 LBS. WORKING PRESSURE
500° F.


"SAFEGUARD"
300 LBS. WORKING PRESSURE
500° F.


"ALL IRON"
500 LBS. WORKING PRESSURE
750° F.

PENBERTHY PRODUCTS

THE three gages shown here are very popular in the oil industry because of their consistently dependable operation. All of them are ruggedly built of the highest grade materials by an organization that has had 48 years experience in the manufacture of quality products. The "Navy Type" is made from Navy Bronze Composition M, the "Safeguard" from high grade steam metal bronze and the "All Iron" from a modern electric iron alloy.

All these gages have automatic shut-off. Both upper and lower body have ball check valves that seat immediately and positively to prevent the loss of liquid when glass is broken. The hand operated stop valves may then be closed with safety and a new glass inserted.

Each gage is carefully tested and rigidly inspected at the factory. For detailed descriptions write for a copy of the new catalog.

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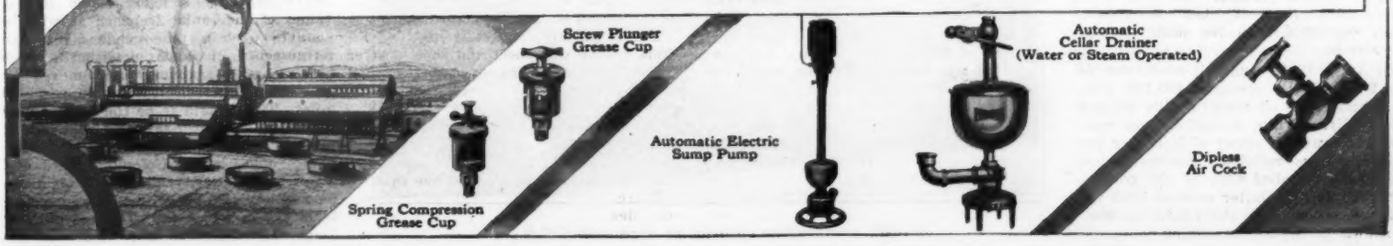
Screw Plunger Grease Cup
Spring Compression Grease Cup
Automatic Electric Sump Pump
Automatic Cellar Drainer (Water or Steam Operated)
Dipless Air Cock

NEWS FROM FOREIGN LANDS

WORLD TRADE

Unless refiners in United States get busy immediately and through co-operative action protect their interest they will lose all of their export business, according to Frank C. Hart, president of the Hartol Products Corp., New York City, who returned last week to United States after spending several weeks in Europe studying marketing conditions.

"My study of the European situation firmly convinces me that American oil producers must make a determined fight for world markets at this time, or they will find these markets slipping from their grasp permanently," Mr. Hart said.

"Conditions throughout Europe are strongly against American expansion. For example, the Rumanian price structure has been such during the past year that American competition has been practically eliminated.

"The new Irak field will further curtail American oil exports. Russia, however, is now a negligible factor in international markets.

"I firmly believe that foreign producers generally will unite to eliminate the United States from world markets, regardless of the outcome of our domestic program. In fact, I understand that such an agreement is being contemplated.

"At present, Europeans laud American invention and science; and American producing and refining methods are copied throughout the world. Through its enterprise and initiative, the American oil industry has built up its own greatest competitors.

"If the American oil industry is to have a fair chance, producers must vigorously co-operate, possibly through a cartel, and obtain their share of world markets. The state department must provide an outlet for our oil surplus by providing for the inclusion of petroleum and its products in the reciprocal trade agreements, and I strongly urge that such provision be made by George Peek in the balance sheet covering imports and exports, which I understand he is preparing for President Roosevelt for use in making these agreements.

"I am convinced by my survey that the situation is of such gravity that it warrants the attention of the enire industry, and of the Government as well. American producers must co-operate in combating this danger to themselves and to all American commerce. The Government, through its reciprocal agreements, can aid the industry in its attempts to obtain its share of world markets."

U. S. S. R.

Crude oil production in the U. S. S. R. for April was maintained at practically the same daily average as in March and the same situation applied to drilling operations with a substantial increase in crude oil runs to stills of refineries. The crude oil production in April averaged 469,000 bbls. daily which compares with 472,000 bbls. in March. The several refineries averaged 421,500 bbls. daily in April, an increase of 30,000 bbls. daily when compared with the daily average for March.

In April, 1933, crude oil production of the U. S. S. R. averaged 400,120 bbls. daily and crude oil runs to stills 337,000 bbls. daily. While operations are running substantially ahead of last year the production and refining departments are behind the so-called plan of the government adopted the latter part of 1933 for 1934 operations. In the producing end, as shown in the accompanying table the crude oil output of April was 85.7 per cent of the plan and for the first four months of this year, 84.1 per cent of the plan although 23 per cent greater than the same period in 1933.

Of the several trusts operating in the producing end, Maineft is the only one which has exceeded its quota. Its April production was 8 per cent above the plan and for the first four months 10 per cent above the plan. The Azneft, which accounts for approximately 75 per cent of the total crude oil production in Russia, dropped to 70 per cent of the plan in April in contrast to its March record which was 90 per cent of the plan for that month. Under the plan most of the trusts were supposed to increase their production steadily from month to month and this they have not been able to do in some cases.

In the drilling end, based on meters drilled, U. S. S. R. operations are 70 per cent ahead of last year for the first four months. However these operations are also behind the plan which, no doubt, accounts for the fact that actual crude oil production has not come up to expectation. Drilling operations in the older fields where many old wells have been deepened and production increased is 83 per cent greater than last year. Wildcatting improved in April but is still behind the plan.

The U. S. S. R. refinery operations have been running under 400,000 bbls. daily but in April were stepped up to 421,000 bbls. daily. The Azneft trust, which operates the principal plants, for the first four months slightly exceeded the plan. The crude runs of the Oil Plants trust are practically double those of a year ago.

The increased crude runs were reflected in gains of gasoline and kerosene production during April. Gasoline production has been stepped up so that April output was only 6 per cent below the plan. The production of refined kerosene in April which exceeds the gasoline production by approximately 50 per cent, totaled 362,390 tons in April.

APRIL, 1934, OIL OPERATIONS IN U. S. S. R.

Crude Oil Production—by Individual Trusts (data in metric tons)

Trust	April 1934	Percent of plan	March 1934	April 1933	Jan.-April 1934	Percent of plan	Jan.-April 1933	4 months of 1934—% of 1933
Azneft	1,564,200	69.6	1,619,400	1,160,100	6,043,600	86.8	4,129,500	146.3
Grozneft	320,200	70.7	345,900	438,500	1,308,200	72.6	1,777,400	73.6
Maineft	80,800	107.7	76,600	47,600	270,100	109.4	183,700	147.0
Embaneft	18,700	93.5	20,700	17,500	69,200	92.3	62,300	111.1
Other Trusts	27,800	51.6	28,550	51,100	110,300	60.9	199,200	55.4
Total	2,011,700	85.7	2,091,150	1,714,800	7,801,400	84.1	6,352,100	122.8

Drilling Operations—by Individual Trusts (data in meters)

Drilling in proven fields	76,505	91.8	79,363	49,603	301,248	93.1	164,343	183.3
Wildcatting in old areas	17,158	73.0	18,437	14,235	67,032	91.3	48,447	138.4
Wildcatting in new areas	13,401	80.5	12,495	7,910	43,029	71.9	28,461	151.2
Total	107,064	86.7	110,295	71,748	411,309	90.1	241,251	170 5

Refinery Operations—by Individual Trusts (data in metric tons)

Crude Oil Runs to Stills

Azneft	1,110,200	98.8	1,183,800	1,024,000	4,438,300	101.4	3,734,600	118.8
Grozneft	665,700	80.0	545,700	454,700	2,216,200	74.1	1,872,200	118.4
Oil Plants	21,100	130.1	20,700	9,400	74,100	85.9	94,600	79.5
Sredazneft	9,300	45.2	2,400	6,100	11,100	34.9	14,700	75.5
Total	1,806,300	90.9	1,732,600	1,494,200	6,739,800	91.3	5,716,100	117.9

Gasoline Production

Azneft	93,500	98.0	81,000	83,500	326,600	88.0	300,900	108.5
Grozneft	147,300	91.7	135,000	145,500	539,800	88.4	539,300	100.1
Other Plants	2,900	116.0	1,900	2,100	9,000	91.7	7,200	122.2
Sredazneft	370	47.4	300	300	1,070	36.1	1,200	89.2
Total	244,570	94.1	218,200	231,400	876,470	88.1	848,600	103.3

Refined Kerosene

Azneft	256,800	103.3	271,400	223,600	1,029,700	105.0	772,900	133.2
Grozneft	157,900	70.7	122,700	79,100	524,400	67.6	376,900	139.1
Avio Plants	2,200	183.3	2,300	600	8,500	107.6	8,000	106.3
Oil Plants	1,650	137.5	1,600	600	5,150	122.6	600	858.3
Sredazneft	240	18.5	300	500	1,240	21.4	1,100	112.7
Total	362,390	86.2	335,900	304,400	1,341,590	82.9	1,159,500	134.6

Oil community houses at Baku, U.S.S.R.

MEXICO

Refinery operations in Mexico so far this year have shown a material increase over the same period in 1933. Data for first quarter of this year show that crude runs to stills averaged 105,000 bbls. daily which compares with average runs of 83,000 bbls. daily for all of 1933. The runs for the first quarter of this year were in excess of average reported crude oil production. Since some crude oil is exported this probably means that refining companies drew on their storage to maintain the heavy crude runs to stills. The crude runs to stills for the first quarter were practically the same as the indicated capacity of the refineries.

The three refinery organizations whose operations account for all the output except the small production of three local refineries are Compania Mexicana de Petroleo "El Aguila" (Shell) with three refineries; Huasteca Petroleum Co. (Standard of New Jersey) with one plant and Pierce Oil Co. S. A. (Consolidated Oil Corp.) with one plant. All the plants of these companies have been enlarged and modernized over the past two years.

FRANCE

In the presence of several hundred guests, including prominent government officials, operations at the new refinery of the Standard Franco-Americana de Raffinage were inaugurated at Port Jerome, France, last week. The refinery actually started operating about a year ago, but all phases of the operations were not completed until recently.

The Standard Franco-Americana de Raffinage is controlled by the Standard Oil Co. of New Jersey with the Atlantic Refining Co. and the Gulf Oil Corp. holders of the remainder of the stock. These companies decided to build the plant in 1929 following action by the French government, which approved several laws designed to promote the construction of refineries in France. The new laws made it practically mandatory on companies desiring to distribute in France to import crude oil and refine their products at plants located in France. With certain restrictions crude oil can now be imported into France duty free when it is to be refined at French refineries. Import taxes on imported refinery products are high. Other major oil interests, including Royal Dutch-Shell, Anglo-Persian, Texas Co. and Socony-Vacuum, have built or are building refineries in France. New companies with French capital have also been formed to build refineries and all the new plants now have a capacity of approximately 100,000 bbls. daily.

The Port Jerome refinery has a rated capacity of 1,000,000 tons of crude oil yearly or approximately 18,000 bbls. daily. It is complete in its operations, including 9,000 bbls. daily cracking with facilities to manufacture lubricating oils. It is said to have cost approximately $15,000,000. It is located on a 450-acre site on the Seine River below Rouen. When the river is deepened it will be possible to bring the crude oil to the refinery in tankers. At present the crude is discharged at Havre and moved by pipe line to the refinery a distance of 20 miles. This is said to be the longest pipe line operating in France. Crude oil at present is obtained from affiliated companies operating in Colombia, Peru and Venezuela. Later, crude requirements in part will be supplied by the Iraq Petroleum Co. in which the Standard of New Jersey and Gulf are interested.

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Demand for Scientific Training in Oil Industry

By H. C. GEORGE
Head, Department of Oil and Gas Production, University of Pittsburgh*

During the first decade of the present century, the growing demand for scientists and engineers in the petroleum industry was met by increasing numbers of college graduates from the old established courses in chemistry, geology, and engineering. However, a need began to be felt for scientists and engineers specially trained for the petroleum industry. In 1912 the University of Pittsburgh established the first department in any university in the world that offered major work in petroleum geology and petroleum engineering. Other American universities entered the field in the following order: University of California 1915, Stanford University 1915, West Virginia University 1916, Colorado School of Mines 1921, Missouri School of Mines 1922, University of Kansas 1924, Louisiana State University 1924, University of Oklahoma 1924, Pennsylvania State College 1928, University of Texas 1928, University of Tulsa 1928, University of Southern California 1929, and Texas A. and M. College 1929.

From 1904 to 1915, several American colleges and universities incorporated as part of some of the courses in chemistry, geology, and engineering, information dealing with the petroleum industry, without including the word petroleum in the name of the course. From 1904 to 1907, I gave instruction in petroleum production as part of the course in mining engineering at the University of Pittsburgh. The University of Oklahoma gave instruction in petroleum geology as early as 1907, as part of the regular curriculum in geology, and Chicago University gave instruction in petroleum geology as early as 1913. The University of California included, as part of the mining course, instruction in petroleum development and production beginning in 1911.

During the period from 1910 to 1920, some chemists, geologists, and engineers who were teachers or were in state or Federal Government service or in the employ of oil or gas companies, gave lectures dealing with the oil and gas industries at some of our American colleges and universities.

Beginning in 1910 the University of Southern California offered courses in petroleum chemistry. In 1913 the University of California began offering instruction in oil field practice. In 1916 Oklahoma and West Virginia Universities began offering courses in petroleum geology and in 1917 Oklahoma University began offering courses in petroleum refining.

So far as I have been able to ascertain, major undergraduate work in petroleum refining has been offered by the following colleges and universities in the order named: Oklahoma University 1917, Stanford University 1920, Colorado School of Mines 1921, University of Pittsburgh 1922, West Virginia University 1922, Missouri School of Mines 1924, Texas A. and M. College 1925, and Pennsylvania State College 1932.

In addition to the American technical schools and universities previously mentioned, the following schools offer some courses dealing with the technology of the petroleum industry:

University of Colorado.
University of Illinois.
University of Kentucky.
Leigh University.
Massachusetts Institute of Technology.
University of Michigan.
University of Minnesota.
Ohio State University.
Oregon State College.
Rice Institute.
Wisconsin State Mining School.
University of Wyoming.

In addition to offering the regular four-year course leading to a degree in some branch of petroleum or natural gas technology, some of our state colleges and universities have shown the tendency during the past five or six years to branch out into short courses, extension courses, and correspondence courses. Although most of this instruction is not of college grade, it reaches a group which would not receive instruction otherwise, meets a great industrial need, and usually is being presented by men well qualified to give the instruction. Work of this character has been carried on by our state colleges for years in other industries, such as agriculture, dairying, and mining, and is a legitimate and worthwhile function of our state institutions of higher learning.

In recent years some of the major oil companies have followed the policy, adopted many years ago by the electrical and steel companies and public service corporations, of giving a special training course for beginners in the industry. The course usually consists of both theory and practice and is generally required of both high school and university graduates, though the requirements for the two groups differ.

*Before the annual meeting, A.I.M.E.

OIL BURNERS IN GREECE

A favorable outlook for the sale of American oil burners in Greece is reported to the Commerce Department by Commercial Attache K. L. Rankin.

At the present time there are approximately 250 oil-burning heating plants in the country, nearly all of which are located in Athens and its neighboring port of Piraeus. It is estimated that there are between 2,000 and 2,500 coal-burning heating installations in Greece which could be converted advantageously to burn oil.

Viscosity-Constant of Lubricating Oil Found Quickly Through the Use of New Chart

A chart for determining quickly the viscosity-constant of lubricating oils has been worked out by the refining department of the mineral industries division of Pennsylvania State College working in co-operation with the Pennsylvania Grade Crude Oil Association. The chart, self explanatory almost in its application, eliminates the calculations necessary in applying the formula

$$\text{Viscosity-constant} = \frac{10G. - 1.0752 \log_{10} (V-38)}{10 - \log_{10} (V-38)}$$

in which V is the viscosity Saybolt of the oil at 100° F. and G is the specific gravity of the oil at 60° F.

The derivation of a chart was undertaken after the department found it necessary to make many such calculations in its work in connection with the use of selective solvents in the processing of lubricants by such methods.

Refiners and equipment manufacturers are now engaged in similar research and the accompanying chart should prove equally helpful in their work.

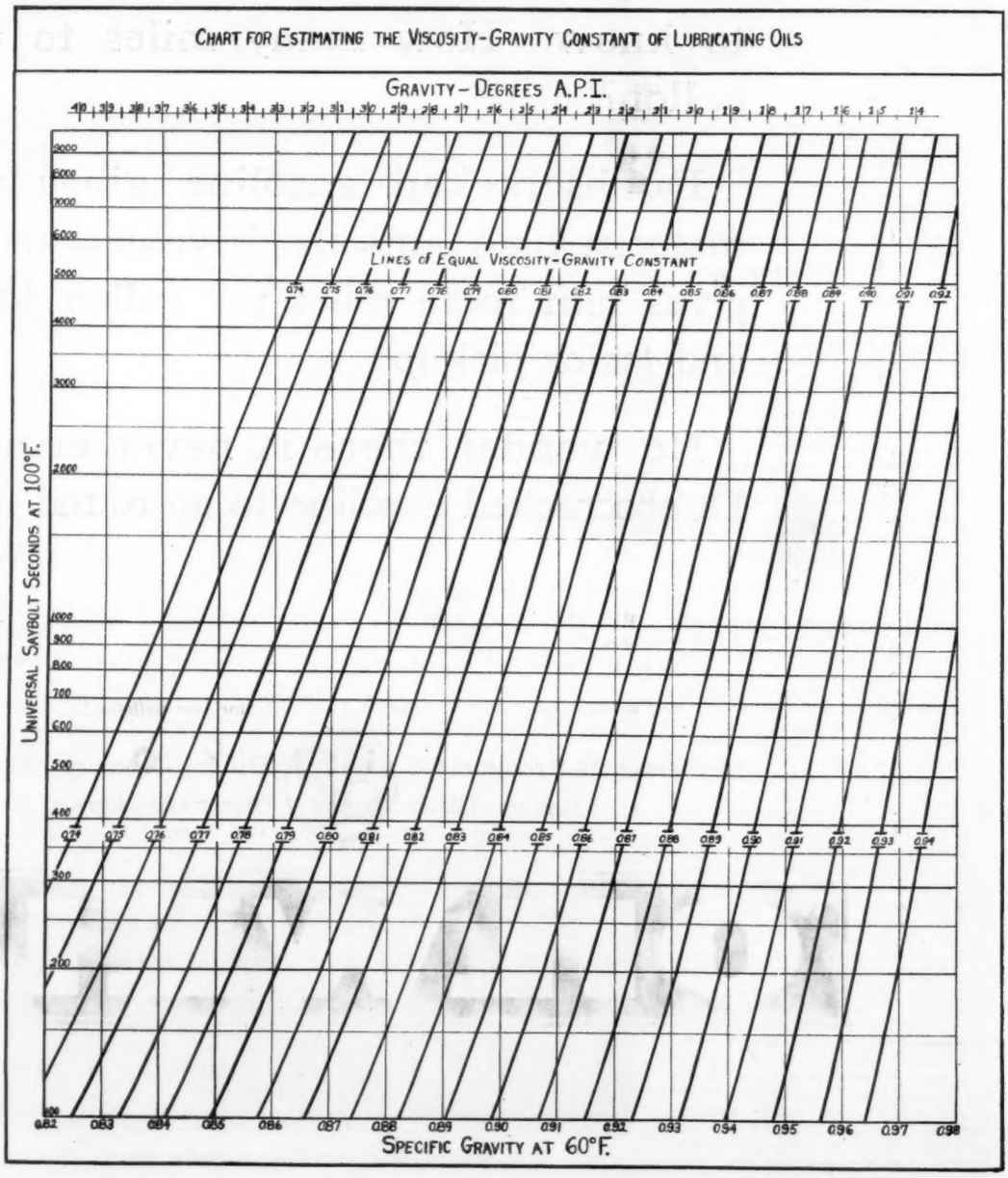
CHART FOR ESTIMATING THE VISCOSITY-GRAVITY CONSTANT OF LUBRICATING OILS
GRAVITY - DEGREES A.P.I.
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SPECIFIC GRAVITY AT 60°F.

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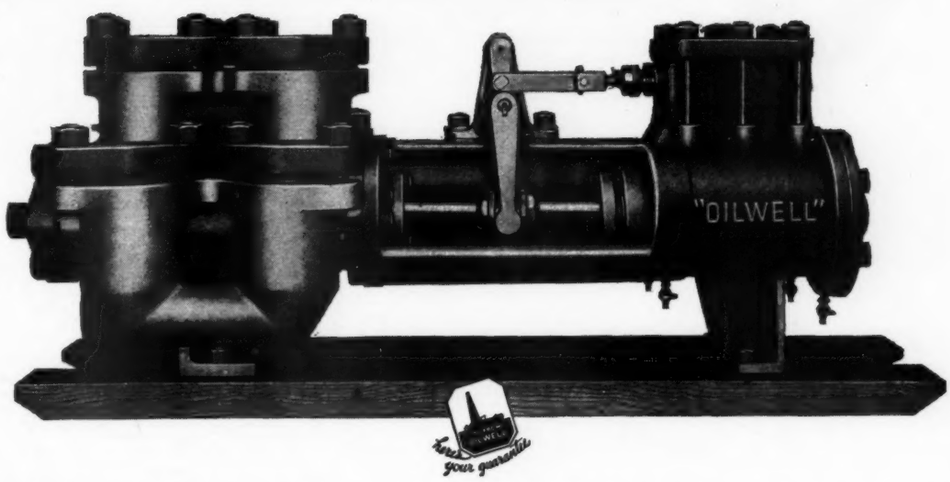

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Why Not Self-Control?

Considering the political by-play which has blocked the Federal control bill oil men are asking themselves whether there would be much difference between having the industry mixed in Federal politics or as it has been in State politics.

Politicians are only politicians, whether they sit on a state board or in a seat in Congress. It is a curious and caustic commentary on politics that the whole country is waiting to heave a sigh of relief when Congress adjourns. Business can then go forward without fear of further immediate disturbance.

The course of Congress in regard to the oil bill is an example and warning of what the industry may have escaped. The industry has been thinking of Federal control in the hands of a man like Secretary Ickes but there was the danger that it might not stay there.

Suppose Federal oil control came to mean being subject to political shuffling in congressional committees would it be any different from political state regulation? The same impulses and motives would operate in both. As little attention would be given to the real need of the industry in either case.

So, perhaps, the failure to pass the Federal bill may be less to be regretted. The only thing that made it desirable was the hope that a Federal executive department shown to be above petty politics might succeed where state political regulation had proved hopeless.

A sample of political claptrap was the statement of a Texas congressman from a district which has no oil that the bill was designed for the benefit of the stripper well producers of Pennsylvania. He did not even know about the stripper wells in North Texas. Imagine people of that calibre regulating the oil industry.

If the industry's hopes from the Federal control bill are not to be realized, as now seems likely, there must be closer co-operation between the leaders of the industry and the oil administrator in making use of such regulatory powers as remain.

It has been apparent since the beginning of the code discussions that there have been complications that handicapped progress. Time after time the industry was led to believe we were on the verge of a solution only to learn at the last moment that a substitute was necessary.

Months have been spent staggering here and there. Proposals lengthily debated, agreements solemnly submitted, have monopolized attention and hope without results.

The collapse of the oil control bill is the latest disappointment. Although aggressively urged by representative supporters it is a question whether the full influence the industry could have brought to bear was marshaled behind it Surely the debatable points in the bill could have been amended to enlist the active advocacy that might have forced congressional action.

Though the bill may be dead, an inquest can do no good except perhaps to emphasize the lesson that no solution will be found until the industry gets together on a definite program that will command general support.

There has been a tendency to place too much dependence upon Federal influence when much might have been accomplished by co-operation within the industry under the broad implications of the national recovery act. The buying of East Texas gasoline is a case in point. Other possibilities are easily apparent if there was the common will to action.

The failure of the Federal control bill in fact throws the industry back upon self-control. State control has failed, Federal control has been denied and might also have been a failure, but the necessity of a solution is clear to all.

The fact that, despite this setback, the industry continues optimistic suggests a determination to persist in the job of self-regulation, with the oil administration's assistance, until real results are obtained.

Overlooked Opportunity

It is a striking thought, brought out in an article in this issue, that the oil industry whose gasoline created the demand for highways that were built by the taxes on that gasoline should have been so backward in seeing the possibilities for the marketing for asphalt and road oils in the construction of those roads.

Such interest as the industry has shown has been largely in a competitive struggle between oil companies rather than in effort to demonstrate the adaptability of oil products to certain types of roads.

The cement industry, on the contrary, has conducted a continuous campaign in practically every county building roads, and before every state highway department. Cement manufacturers have spent large sums developing the application of cement to all types of road work while much of the development work on asphalts has been done by highway departments rather than asphalt manufacturers.

The present is an opportune moment for the oil industry to bestir itself. Public attention is being centered on highway expenditures as the burden of general taxation becomes heavier. There is a general belief that highway construction has cost too much, that the political overhead has been too great.

Much of the money spent for roads was wasted in the construction of high cost highways where less expensive roads would have served satisfactorily. Attention has been centered on city to city super-highways while the farms and small towns were left in the dirt.

The returning trend of population to the countryside is going to bring a demand for more attention to secondary roads which can be constructed satisfactorily by the use of asphalt and road oils.

By overlooking the possibilities for the marketing of these products the oil industry has been blind to its loss in several ways. It has seen the gasoline tax increased to meet unwarranted expenditures. Had the money been spent economically more hard surface roads would have been constructed which would have increased the consumption of gasoline.

Besides the oil industry would have had a market for a product now largely sold as fuel in competition with cheap coal.

The time seems ripe for the oil manufacturers to organize, as the cement people have done, and be in position to present their case to Federal, state, county and city highway and street departments.

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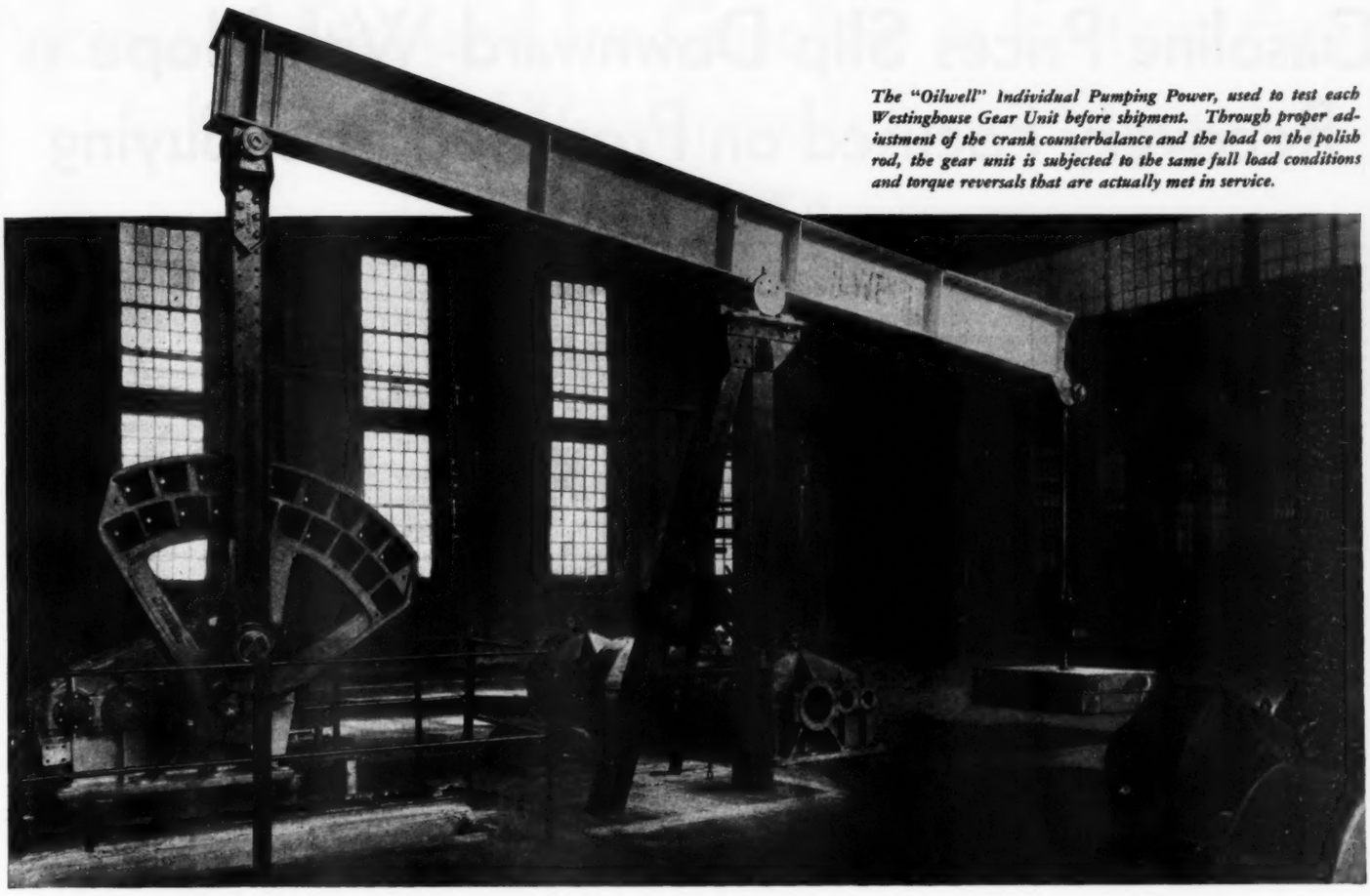

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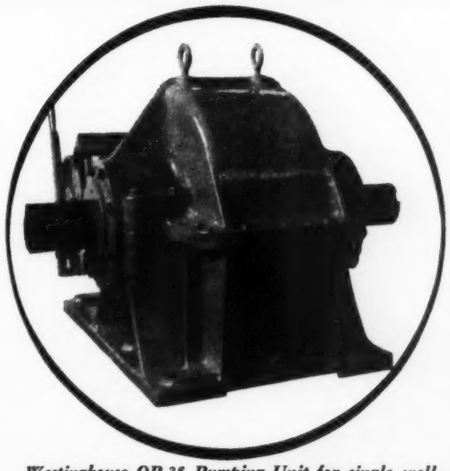

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Gasoline Prices Slip Downward With Hope of Recovery Focused on Proposed Pool Buying

By W. T. ZIEGENHAIN

Unless major refiners resume purchases of gasoline in the East Texas and North Texas areas Group 3 (Oklahoma) motor fuel prices are likely to continue their slow downward movement. Hope that buying would develop before the end of the week was the only factor that kept third grade gasoline from going below 3⅞ cents Tuesday. This hope was based upon an expressed willingness to buy on the part of several very large refiners, providing "a ruling be secured from the solicitor of the Interior Department that they be relieved of prosecution or predjudice should it be found that any portion of the gasoline purchased under the 3 per cent plan be made from crude oil illegally produced." An agreement to take certain stocks and production from refineries operating within their allocation was the basis for the discussion.

Obviously this came as a big order to the Interior Department and statements made by several of the potential buyers indicated that the answer had to be clean-cut or they would not continue to stand on the side lines. With five large refiners taking this position, little permanent good could be expected from the efforts of the balance, and spot trading remains near a stand still.

To make the picture just a little darker, there are some who contend that such buying that may develop will operate as a temporary stimulant and that this in turn will offer another excuse to build more plants in East Texas, produce more illegal oil and seriously threaten the crude price structure.

At the present time there are 84 plants in East Texas. Seven of these were completed in the past two weeks. The mere fact that the number of refineries is increasing at a rapid rate should serve to show that solution of the Mid-Continent refinery market problem is not to be found in buying up distress material in East Texas but in curtailing the production of crude there.

It is admitted, however, that such a job is a difficult one and honest efforts are being made to bring this about, but so far these efforts have not produced the desired results and it seems only reasonable that buyers of distress gasoline be relieved of the responsibility of tracing its origin. This becomes especially easy to appreciate when some of the tricks of the hot oil artists are revealed. As an example, one refinery was found to be getting oil from a line coming from one of the major pipe lines going to the Gulf Coast. A check of deliveries into and out of the major line agreed so it was concluded that oil was being delivered into the line at some other point to equalize the quantity taken by the local refinery. Such a connection was found and when traced, led to a well which was connected to a second major pipe line. The hidden line was taking all oil that could be produced over the allowable and to the unsuspecting, the well was being operated in a legal manner. Complicated arrangements such as this involve the innocent and the guilty and to fix the responsibility of each becomes a problem which the gasoline purchaser does not wish to assume.

Refinery Gasoline Prices

Offers were made on Monday by East Texas refiners to sell 55 octane gasoline for 3¼ cents basis Group 3 over this week. About 50 cars of this material were purchased. Offers of 3⅞-cent material were numerous and in face of these, it was difficult for Oklahoma refiners to sell their third grade material for 3⅞ cents. The regular and premium grades did not suffer in proportion and for the time being at least, are moving at about one-eighth cent under their price range a week ago. Any stiffening in the price of the third grade would no doubt permit the price of the higher octane grades to move back quickly to last week's level.

Natural Gasoline

The volume of natural gasoline moving on the spot market is very small and prices promise to go lower if continued. The proposed increase in refinery buying in order to help the natural market has not been felt although a few individual refiners have purchased a little more than their bare requirements. Until the refinery market itself, strengthens, most students of the natural market see little help coming from any "agreement" among refiners. While no price changes were made, 26-70 looked weaker and the 18-55 grade lent the principal support to the natural market.

Fuel Oils

The fuel oil market showed no price changes. There was an increased volume of East Texas fuel available and at 2½ cents a barrel below the offers of a week ago. If this may be taken as an indication of the direction the Oklahoma price may move, it accounts for the slow market here.

Distillates and Gas Oil

The seasonal decline in the consumption of distillates and the falling off in the shipments of East Texas gas oil to the East Coast refineries for cracking accounted for the lower prices quoted on

(Continued on Page 26)

Refined Oil Market Barometer

The announcement of substantial withdrawals of gasoline from stocks, particularly along the East Coast, offered the only general encouragement to refiners during the past week. Motor fuel prices were lower in the Mid-Continent and Gulf Coast areas and unchanged at all other points. Support of the East Texas market, the sore spot of the Mid-Continent and Gulf Coast markets, is expected from pool buying with the belief that the administration will relieve such buyers from the responsibility of determining whether this gasoline was made from "hot oil." Kerosene, wax, distillates and bright stocks were generally weak with fuel oil strong in California only.

Mid-Continent—Refinery gasoline, particularly low octane grade, very weak. Natural gasoline unchanged but trading slow. Kerosene, distillates and wax lower.

East Coast—Gasoline prices unchanged with demand continuing high. Furnace oils, bright stocks and neutrals weak.

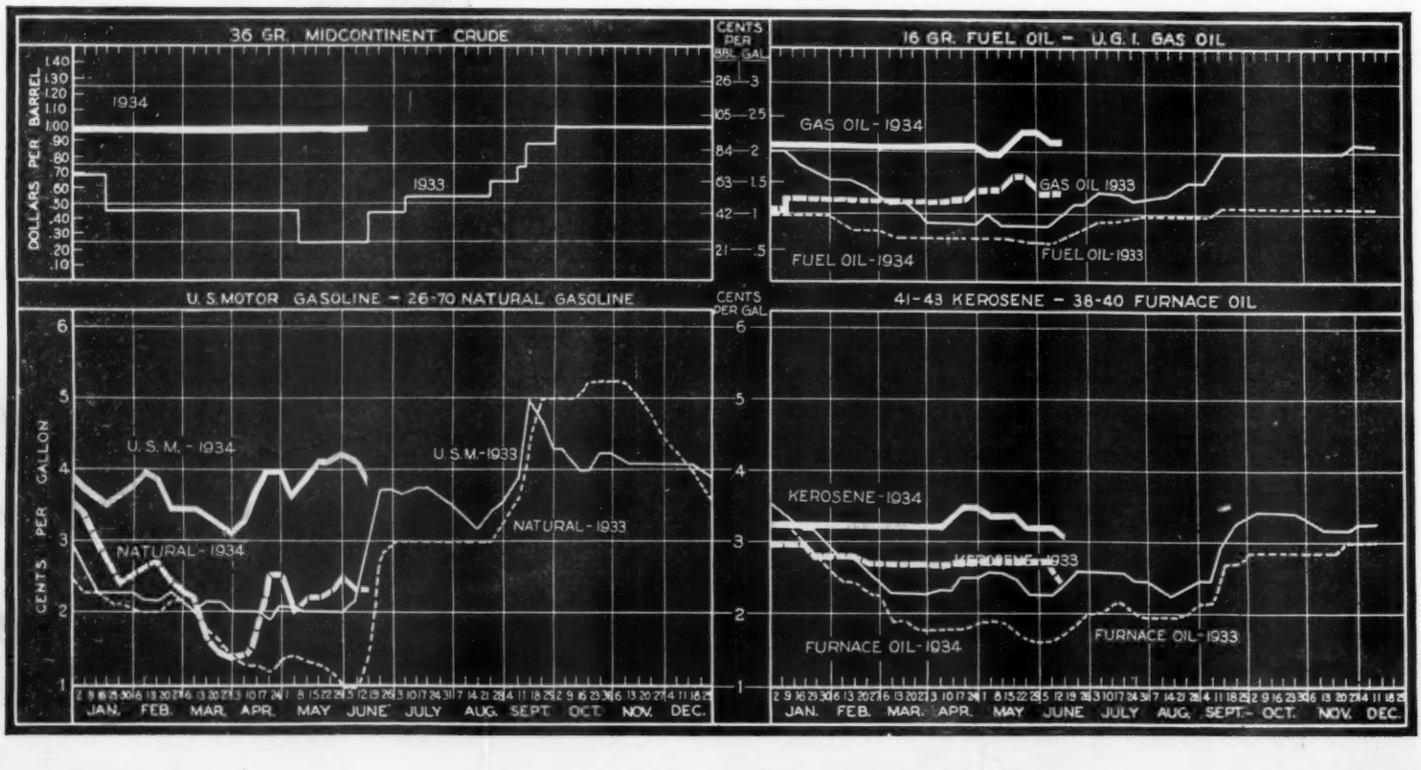
Gulf Coast—Gasoline prices off. Prices other important products tending to sag.

Pennsylvania—Bright stocks slightly lower. Straightrun gasoline up.

California—Gasoline unchanged. Fuel oils strong.

Chicago—Gasoline weak and offerings increasing. Lubs steady.

Representative Mid-Continent Quotations on Crude Oil and Refined Products Basis Oklahoma (Group 3)



Increased Demand for Gasoline in Eastern Area Is Indicated; Withdrawals From Storage

By C. O. WILLSON
New York Bureau, The Oil and Gas Journal

NEW YORK, June 11.—Further indications that gasoline demand through the summer months will run from 5 to 15 per cent above last year, coupled with the first substantial withdrawal from storage of the year, were the favorable developments of the past week in the East Coast refinery market. For the week ending June 2, East Coast refiners drew on their gasoline stocks, according to A.P.I. figures, for a total of 389,000 bbls. and for the country as a whole 1,261,000 bbls. These withdrawals, coupled with a large reduction in crude runs to stills in several refining areas, were interpreted locally as indicating that the refinery control program had taken definite form and the month of June would see a large reduction in stocks, a development which most observers believe is necessary if the recent advances in gasoline quotations are maintained. The several million barrels of storage gasoline in excess of last year have constituted one of the unfavorable factors in the present refined market situation, and market students have stressed the desirability of reducing these inventories in an orderly manner starting in the early summer weeks.

On the consuming side sellers have been encouraged by the continued increases in the demand for motor fuels throughout this territory. This gain in demand over 1933 was apparent in the early months of this year but some believed that with the start of the summer period the industry would do well if it held the demand of last summer. It now appears, however, that the increase will continue with estimates of the gain usually placed at 10 per cent. In this connection it is known that some companies are showing a much larger gain due to aggressive sales campaigns since the first of the year. More than average increases in total consumption also are indicated in certain industrial sections where employment is on a much better basis than last year. The improved employment is the basis for the contention of some that the tourist business will be much better this year than last.

Prices Unchanged

So far as tank car prices are concerned, the situation in gasolines is practically the same as last week. A few companies advanced their prices during the week to levels which had already been established by other sellers. The prevailing quotation for middle octane gasoline in tank car and small barge lots is 6½ cents with one-fourth cent more for 65 octane and above with the branded regular grades of the major refiners available at 7 and 7¼ cents, basis New York Harbor. There are several points among the Atlantic Seaboard states in which these base prices are not being maintained due to the fact that tank wagon and service station prices have not returned to normal levels. Efforts have been made over the past month to iron out conditions at all these subnormal points but there are several important consuming centers at which all grades of gasoline are selling from 1 to 3 cents a gallon below the normal levels. Blame for these situations is generally credited to independent jobbing interests who insist on maintaining tank wagon and service station prices under those of their major competitors. The latter in most cases are persuing a policy of meeting competition on a price basis whenever and wherever it appears.

The export gasoline market continues very dull so far as spot business is concerned. A nominal quotation for 64-66 375 export at the Gulf Coast is 4¾ cents with prices ranging down to 4¼ cents for U. S. Motor. It is said that spot business is again going to Rumanian sellers who are quoting as low as 4¼ cents basis the Gulf Coast for 375 endpoint material. Local sellers have been somewhat mystified as to how the Rumanian refiners can sell at these prices taking into consideration the difference in currency values which at this time give the refiners of this country an important advantage. At the same time, the European demand for crude oil and cracking stocks continues active at the Gulf with buyers willing to make long time contracts. This situation largely reflects the rapid expansion of refining facilities in France which has made French companies large buyers of raw materials rather than finished products.

Production and Stocks

The following table gives the production of refinery products for April, 1933 and 1934, with stocks at the end of April for the East Coast based on Bureau of Mines reports made available during the past week:

PRODUCTION
(Data in barrels)

	1934	1933
Crude runs to stills	14,192,000	13,639,000
Gasoline	6,107,000	5,511,000
Kerosene	857,000	831,000
Gas oil and distillate	1,330,000	1,138,000
Residual fuel oil	3,816,000	3,968,000
Lubricants	643,000	580,000
Wax (lbs.)	19,320,000	19,320,000
Coke (tons)	10,400	17,600
Asphalt (tons)	93,600	63,100

STOCKS ON APRIL 30

Gasoline	18,820,000	16,329,000
Kerosene	1,031,000	1,222,000
Gas oil and distillate	2,029,000	2,480,000
Fuel oils	4,919,000	3,756,000
Lubricants	2,132,000	2,720,000
Wax (lbs.)	36,279,000	34,407,000
Coke (tons)	9,900	18,100
Asphalt (tons)	128,300	102,500

This report shows that during April crude runs to stills and gasoline production ran considerably more than the same month in 1933 with stocks approximately 2,500,000 bbls. greater at the end of the month. This same comparative situation has prevailed in East Coast refinery operations for several months and it is also typical of conditions for the country as a whole.

In regard to production, a more favorable condition exists in the case of kerosene, distillate, gas oil and heavy fuels. However, the stocks of these products increased rapidly during April due in part to a seasonal decline in demand. Kerosene stocks at East Coast refineries jumped from 792,000 bbls. on March 31 to 1,031,000 bbls. on April 30; gas oil and distillate stocks from 1,613,000 to 2,029,000 bbls., and fuel oils from 3,688,000 to 4,919,000 bbls. Continued heavy production of these products with a decrease in demand accounts for this development. The stocks of these products were exceptionally low in March due to a heavy winter demand, and present stocks are not considered heavy. Stocks of lubricants were reduced slightly in April although production increased.

Wax Stocks Increase

The data on wax explain the recent weakness in that product. Stocks of wax have increased steadily since the first of the year and at East Coast refineries they doubled in the four-month period ending April 30. Buying was heavy the last half of 1933 and prices advanced rapidly the last three months of 1933 after stocks had been reduced to their lowest levels in several years. Since that time the high prices apparently have tended to slow up both domestic and export buying and stocks have accumulated.

Eastern refiners have reduced their production of coke although demand is better than it was a year ago, and stocks as shown in the above table are 50 per cent less. The explanation given is the more favorable market for fuel oil which has caused some refiners to change their cracking operations so that they obtain a heavy fuel instead of coke as a residual product. While better prices have been received for coke over the past eight months, the returns are still far too low to justify the production of coke except as a by-product of some profitable phase of plant operation.

Prices

Kerosene is reported to have been offered in spot sales as low as 5¼ cents although most sellers in New York Harbor area are quoting a minimum of 5½ cents. The demand is slow.

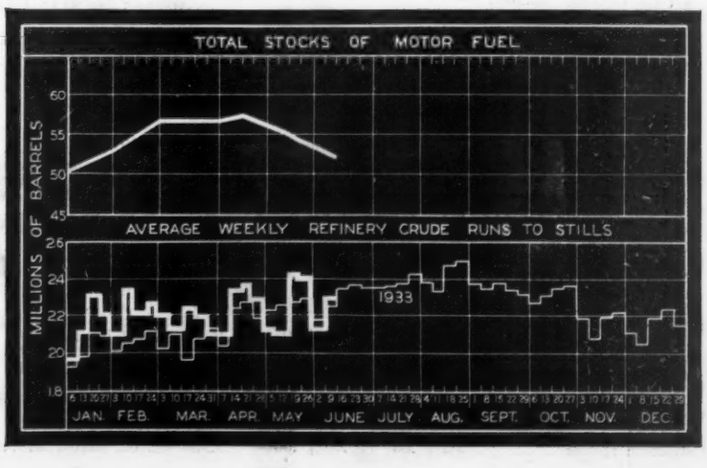
A wide range of prices is shown in spot sales of distillates. The usual asking price for No. 1 furnace oil is 5¼ to 5½ cents with 5 cents for Nos. 2, 3 and 4. The latter, however, has been sold spot as low as 4½ cents and the other grades 4¾ cents. In the tank wagon end there has been a break in the efforts to secure 7 cents for Nos 2, 3 and 4 oils in this section as the base price for the coming season. Some sellers are reported to be renewing contracts on a basis of 6½ cents for the No. 4 oil.

The situation in the case of lubricants and wax is unchanged from last week. Steam refined stocks and bright stocks are easier but prices are being maintained by most sellers. Low cold test neutrals continue scarce and firm in price. Russian competition in the sale of wax in this country and South American countries is a factor in the wax market in which there is practically no new export business with the domestic demand slow. Contract movement of wax to foreign and domestic sellers is steady.

American Petroleum Institute Weekly Refinery Statistics

	Capacity reporting per cent	Daily crude runs (bbls.)	Finished motor fuel (bbls.)	Gas oil and fuel oil (bbls.)
East Coast	100.0	476,000	16,688,000	7,325,000
Appalachian	93.3	84,000	1,609,000	892,000
Indiana, Illinois, Kentucky	94.6	316,000	8,256,000	2,955,000
Oklahoma, Kansas, Missouri	83.7	241,000	5,459,000	3,177,000
Inland Texas	47.6	85,000	1,186,000	1,683,000
Texas Gulf	97.5	472,000	4,492,000	5,984,000
Louisiana Gulf	96.4	111,000	1,329,000	1,053,000
North Louisiana and Arkansas	83.7	51,000	296,000	416,000
Rocky Mountain	66.7	34,000	1,120,000	674,000
California	96.9	435,000	12,331,000	79,400,000
Total United States	89.7	2,305,000	52,766,000	103,559,000

Note: Finished motor stocks shown in graph and in table include those at refineries, at bulk terminals and in pipe lines, but do not include 5,000,000 to 7,000,000 bbls. of unfinished gasoline which could be reprocessed quickly.



REFINERY AND CRUDE PRICES

Quotations on refined products are for interstate or export movement except as otherwise noted

Quotations are exclusive of the Federal tax of 1 cent a gallon on gasoline and 4 cents on lubricating oils.

Refinery Gasolines

	June 12		June 5	
OKLAHOMA (Group 3)—				
U. S. Motor grades:				
Below 60 octane	.037/8	.041/8	.041/8	.043/8
60-64.9 octane	.043/8	.047/8	.043/4	.047/8
65-70 octane	.047/8	.051/8	.05	.051/8
60-62 400 grades:				
Below 60 octane	.041/8	.041/4	.043/8	.041/2
60-64.9 octane	.043/8	.05	.043/8	.05
65-70 octane	.05	.051/8	.05	.051/8
64-66 375	.041/4	.041/2	.041/2	.045/8
68-70 360	.043/8	.043/8	.043/8	.043/4
NORTH TEXAS—				
U. S. Motor grades:				
Below 60 octane	.033/4	.04	.04	.041/4
60-64.9 octane	.041/2	.043/4	.043/4	.047/8
65-70 octane	.043/4	.05	.05	.051/8
60-62 400	.04	.041/4	.041/4	.043/8
64-66 375	.041/8	.041/4	.043/8	.041/2
NORTH LOUISIANA (Ark., N. La. & Miss. del.)—				
U. S. Motor grades:				
Below 60 octane	.043/8	.045/8	.045/8	.047/8
60-64.9 octane	.051/4	.053/8	.053/8	.051/2
65-70 octane	.053/8	.055/8	.051/2	.053/4
60-62 400	.043/8	.047/8	.043/8	.047/8
68-70 360	.041/2		.041/4	.041/2
ARKANSAS (Ark., N. La. & Miss. del.)—				
U. S. Motor grades:				
Below 60 octane	.043/8	.045/8	.045/8	.047/8
60-64.9 octane	.051/4	.051/2	.053/8	.051/2
65-70 octane	.053/8	.055/8	.051/2	.053/4
CHICAGO (based on Oklahoma Group 3)—				
U. S. Motor grades:				
Below 60 octane	.04	.041/4	.041/4	.043/8
60-64.9 octane	.041/2	.043/4	.047/8	.05
65-70 octane	.043/4	.05	.051/8	.053/4
60-62 400	.041/8	.041/4	.043/8	.041/2
64-66 375	.047/8	.041/2	.041/2	.043/8
68-70 360	.041/2	.043/8	.043/8	.043/4
Aviation fighting grade	.051/8	.053/4	.051/4	.053/8
PENNSYLVANIA (inland refineries)—				
58-60 U. S. Motor:				
Below 60 octane	.053/4	.053/4	.051/2	.053/4
60-64.9 octane	.061/2	.063/8	.061/2	.063/8
65-70 octane	.07	.071/8	.07	.071/8
68-70 350	.061/2		.061/4	.061/2
CALIFORNIA (domestic movement)—				
54-58 U. S. Motor	.053/4	.061/2	.051/2	.061/2
58-60 400	.061/4	.07	.061/4	.07
EAST COAST—				
U. S. Motor, below 60 octane:				
New York	.06	.061/4	.06	.061/4
Baltimore	.06	.061/4	.06	.061/4
U. S. Motor, 60-64 octane:				
New York (Bayonne)	.061/4	.061/2	.061/4	.061/2
Philadelphia	.061/2	.063/4	.061/2	.063/4
Boston	.0645	.0670	.0645	.0670
Baltimore	.061/4	.061/2	.061/4	.061/2
Charleston, S. C.	.061/4	.061/2	.061/4	.061/2
U. S. Motor, 65 and above:				
New York (Bayonne)	.061/2	.063/4	.061/2	.063/4
Philadelphia	.063/4		.063/4	
Boston	.0670	.07	.0670	.07
Baltimore	.061/2	.063/4	.061/2	.063/4
Charleston, S. C.	.061/2	.063/4	.061/2	.063/4
GULF COAST (domestic)—				
U. S. Motor:				
Below 60 octane	.043/4	.05	.051/4	.051/2
60-64.9 octane	.05	.051/4	.051/2	.055/8
65 octane and higher	.051/4	.051/2	.055/8	.053/4

Naphthas

	June 12		June 5	
PENNSYLVANIA (inland refineries)—				
50-54 430-450 (blending)	.053/8		.051/4	
CHICAGO (based on Oklahoma Group 3)—				
50-52 450 (blending)	.04	.041/4	.041/4	.041/2
Cleaners' naphtha, 56-58 gr., 200 i.b.p.-330 e.p.	.063/4	.07	.063/4	.07
Lacquer diluent, 180 i.b.p.-250 e.p.	.073/4	.08	.073/4	.08
Lacquer diluent, 140 i.b.p.-200 e.p.	.083/4	.09	.083/4	.09
Rubber solvent, 68-70 gr., 100 i.b.p.-330 e.p.	.063/4	.07	.063/4	.07
Stoddard solvent, 300 i.b.p.-410 e.p., over 83° flash	.061/4	.061/2	.061/4	.061/2
Pet. thinner, 290-300 i.b.p.-415 e.p., over 83° flash	.061/4	.061/2	.061/4	.061/2
V.M.&P. naphtha, 56-58 gr., 190-200 i.b.p.-330 e.p.	.063/4	.07	.063/4	.07
Petroleum spirits	.053/4	.06	.053/4	.06

Natural Gasolines

	June 12		June 5	
OKLAHOMA (Group 3)—				
Grade 26-70	.023/8		.023/8	.021/2
Grade 18-55	.03	.031/8	.03	.031/8
Low vapor pressure grades:				
15 lb. v.p. (max.)	.033/8	.031/2	.033/8	.031/2
11 lb. v.p. (max.)	.04	.041/4	.04	.041/4
NORTH TEXAS—				
Grade 26-70	.021/4		.021/4	
Grade 18-55	.023/4	.027/8	.023/4	.027/8
Low vapor pressure grades:				
15 lb. v.p. (max.)	.031/4	.033/8	.031/4	.033/8
11 lb. v.p. (max.)	.033/8	.04	.033/8	.04
NORTH LOUISIANA—				
Grade 26-70	.027/8		.027/8	
CALIFORNIA—				
75-78 375	.051/4	.06	.05	.06

Kerosenes

(All kerosenes water white)

	June 12		June 5	
OKLAHOMA (Group 3)—				
41-43	.031/2	.031/2	.031/4	.031/2
42-44	.033/8	.033/4	.031/2	.033/4
NORTH TEXAS—				
40-41	.03	.031/4	.031/2	.033/8
41-43	.031/8	.033/8	.031/4	.031/2
NORTH LOUISIANA (Ark., N. La. & Miss. del.)—				
41-43	.031/4	.033/8	.031/2	
ARKANSAS (Ark., N. La. & Miss. del.)—				
41-43	.031/2	.035/8	.033/4	
PENNSYLVANIA (inland refineries)—				
45	.045/8	.047/8	.045/8	.047/8
46	.043/4	.051/2	.043/4	.051/2
47	.05	.051/4	.051/8	.055/8
CHICAGO (based on Oklahoma Group 3)—				
41-43	.031/4	.031/2	.031/2	.035/8
42-44	.031/2	.033/8	.033/8	.033/8
CALIFORNIA (Pacific Coast consumption)—				
38-40 high burning test	.043/4	.05	.043/4	.05
NEW YORK (Bayonne, N. J.)—				
41-43	.051/2	.053/4	.051/2	.053/4
GULF COAST (domestic)—				
41-43	.043/8	.041/2	.041/2	.045/8

Petroleum Coke

(Prices per ton f.o.b. refineries in Chicago area)
(Refineries will absorb freight to 80 cents a ton)

	June 12		June 5	
Breeze (screenings)	5.00		5.00	
Pile run	5.00		5.00	
Direct from still	6.00		6.00	
Lump and egg	7.00	8.00	7.00	8.00

Furnace Oils and Tractor Fuels

(Zero cold test under 190° flash and good odor)

	June 12		June 5	
OKLAHOMA (Group 3)—				
32-36 straw	.023/8	.021/2	.025/8	.023/4
36-38 straw	.021/2	.025/8	.025/8	.023/4
38-40 straw	.021/2	.023/4	.023/4	.027/8
39-41 prime white	.023/8	.027/8	.021/8	.03
NORTH TEXAS—				
38-40 straw	.021/2	.023/4	.023/4	.03
NORTH LOUISIANA (Ark., N. La. & Miss. del.)—				
36-40 furnace oil	.027/8	.03	.03	
ARKANSAS (Ark., N. La. & Miss. del.)—				
32-36 furnace oil	.025/8	.023/4	.023/4	.027/8
CHICAGO (based on Oklahoma Group 3)—				
32-36 straw	.025/8	.023/4	.025/8	.027/8
38-40 straw	.023/8	.023/4	.023/4	.027/8
38-40 prime white	.023/8	.03	.023/8	.03
NEW YORK (Bayonne, N. J.)—				
36-40 (No. 1 grade)	.053/4	.051/2	.051/2	.053/4
32-36 (No. 2 grade)	.043/4	.05	.043/4	.05
21 industrial (No. 4 grade)	.041/2	.05	.043/4	.05

Gas Oil, Diesel Oil and Fuel Oil

(Gas oil per gallon; Diesel and fuel oils per barrel)

	June 12		June 5	
OKLAHOMA (Group 3)—				
32-36 gas oil cracking stocks	.021/4	.023/8	.021/4	.023/8
U.G.I. gas oil	.021/4	.023/8	.021/4	.023/8
32-36, zero to 15 gas oil	.021/2	.025/8	.021/2	.025/8
28-30, No. 3 burner oil	.95	1.00	.95	1.00
28-30, zero to 10 fuel oil	.90	.95	.90	.95
26-30, zero to 10 fuel oil	.85	.95	.85	.95
24-26 fuel oil	.771/2	.80	.771/2	.80
20-22 fuel oil	.671/2	.70	.671/2	.70
Below 16 fuel oil	.621/2	.65	.621/2	.65
NORTH TEXAS—				
32-36 gas oil, industrial	.02		.02	
22-26 fuel oil	.671/2	.70	.671/2	.70
Below 20 fuel oil	.571/2	.621/2	.571/2	.621/2
NORTH LOUISIANA (Ark., N. La. & Miss. del.)—				
32-36 gas oil, zero	.025/8	.023/4	.025/8	.023/4
14-16 fuel oil	.70	.75	.70	.75
ARKANSAS (Ark., N. La. & Miss. del.)—				
30-32 gas oil, zero	.025/8	.023/4	.025/8	.023/4
32-36 gas oil	.021/2	.025/8	.021/2	.025/8
14-16 fuel oil	.70	.75	.70	.75
CHICAGO (based on Oklahoma Group 3)—				
32-36 gas oil, industrial	.021/4	.023/8	.021/4	.021/2
28-30 zero to 10, fuel oil	.971/2	1.021/2	.971/2	1.021/2
26-28 zero to 10, fuel oil	.871/2	.90	.871/2	.90
22-26 zero to 10, fuel oil	.771/2	.80	.771/2	.80
18-22 zero to 10, fuel oil	.621/2	.671/2	.65	.671/2
Below 18 fuel oil	.571/2	.60	.571/2	.60

Note: Fuel oils of more than 40 cold test generally 5 to 15 cents per barrel less in all these areas.

PENNSYLVANIA (inland refineries)—				
36-40	.043/8	.041/4	.04	.043/8
CALIFORNIA—				
30-34 gas oil per bbl.	1.00	1.10	1.00	1.10
27 plus Diesel	1.05	1.15	1.05	1.10
15-19 bunker (at tidewater)	.60	.75	.60	.70
15-19 (cargo lots)	.55	.65	.55	.60
15-19 (tank cars)	.55	.75	.50	.65
GULF COAST—				
28-30 gas oil	.031/2	.033/4	.031/2	.033/4
28-30 Diesel (bunkers)	1.80		1.80	
Bunker C (bulk cargoes)	.95	1.00	.95	1.00
Bunker C (bunkers)	1.05	1.10	1.05	1.10
NEW YORK (Bayonne, N. J.)—				
28 plus, gas oil	.041/2	.05	.041/2	.05
28-30 Diesel (lighterage 6½ cents per bbl.)	1.95		1.95	
28-30 Diesel (tank cars)	.043/4	.05	.043/4	.05
*Bunker C (to ocean-going ships in N. Y. harbor)	1.30		1.30	

*Lighterage charge 5 cents per barrel additional.

Neutral Oils

(Vis. at 100° F. except Pennsylvania, and color N.P.A.)

	June 12		June 5	
OKLAHOMA (Group 3)—				
Zero to 10 Cold Test:				
150-3	.091/2		.091/2	
180-3	.103/4		.103/4	
180-4	.101/4		.101/4	
200-3	.111/4		.111/4	
200-4	.103/4		.103/4	
240-3	.131/4		.131/4	
240-4	.123/4		.123/4	
280-3	.141/4		.141/4	
280-4	.131/2		.131/2	
300-3½	.143/4		.143/4	
400-4	.163/4		.163/4	
100-2 paraffin oil	.061/2		.061/2	
15-30 Cold Test:				
200-3	.101/4		.101/4	
200-4	.093/4		.093/4	
240-3	.121/4		.121/4	
240-4	.113/4		.113/4	
280-3	.131/4		.131/4	
280-4	.121/2		.121/2	
GULF COAST—				
Pale Oils:				
200-3	.071/2		.071/2	
300-3	.08	.083/4	.08	.083/4
500-3½	.09	.093/4	.09	.093/4
750-3½	.091/2	.093/4	.091/2	.093/4
1,200-3½	.10	.103/4	.10	.103/4
2,000-4	.103/4	.101/2	.103/4	.101/2
Red Oils:				
200-5-6	.061/2		.061/2	
300-5-6	.07	.073/4	.07	.071/4
500-5-6	.08	.083/4	.08	.083/4
750	.083/4	.083/4	.083/4	.083/4
1,200-5-6	.09	.093/4	.09	.093/4
CALIFORNIA—				
Pale Oils:				
100-2½-3	.23	.25	.23	.25
200-2½-3	.23	.25	.23	.25
300-3-3½	.23	.25	2.3	.25
350-3-4	.23	.25	.23	.25
400-3-4	.23	.25	.23	.25
450-3-4	.23	.25	.23	.25
550-3-4	.23	.25	.23	.25
600-3-4	.23	.25	.23	.25
Red Oils:				
200-4-5	.23	.25	.23	.25
300-5-6	.23	.25	.23	.25
350-5-6	.23	.25	.23	.25
400-5-6	.23	.25	.23	.25
450-5-6	.23	.25	.23	.25

500-5-6	.23	.25	.23	.25
600-5-6½	.23	.25	.23	.25
700-6½ plus	.23	.25	.23	.25
750-6½ plus	.23	.25	.23	.25
900-6½ plus	.23	.25	.23	.25
PENNSYLVANIA—				
150 vis. at 70° F., 3 color; 400-405 flash:				
Zero pour test	.25½	.26	.25½	.26
10 pour test	.24½	.25	.24½	.25
15 pour test	.24	.24½	.24	.24½
25 pour test	.23	.23½	.23	.23½
180 vis. at 70° F., 3 color:				
25 pour test	.27	.27½	.27	.27½
200 vis. at 70° F., 3 color:				
Zero pour test	.32	.33½	.32	.33½
10 pour test	.30½	.32	.30½	.32
15 pour test	.30	.30½	.30	.30½
25 pour test	.29½	.30	.29½	.30

Bright and Steam Refined Stocks

OKLAHOMA (Group 3)—	June 12		June 5	
Bright Stocks:				
190-200 D	.27¼		.27¼	
150-160 D, 0-10	.24½		.24½	
150-160 D, 10-25	.24		.24	
150-160 25-40	.23½		.23½	
150-160 E	.23½		.23½	
Steam refined:				
630 light green (treated)	.15½		.15½	
600 light green (untreated)	.07½	.09	.07½	.09
600 dark green (untreated)	.05½	.08	.05½	.08
PENNSYLVANIA—				
Steam refined:				
600	.17½	.18	.19	.19½
650	.20	.21½	.21½	.22
600 Pennsylvania flash	.21	.21½	.22½	.23
630 Pennsylvania flash	.25½	.26	.27	.27½
600 Warren E filtered	.22	.22½	.22	.22½
Bright Stocks (Pennsylvania grade, No. 8 color, 145-50 at 210; 540-550 flash):				
10 pour test	.29	.29½	.30	.30½
15 pour test	.28½	.29	.29½	.30
20 pour test	.28	.28½	.29	.29½
25 pour test	.27½	.28	.28½	.29

Wax and Petrolatum

(Prices per pound)

OKLAHOMA (Group 3)—	June 12		June 5	
124-126 white crude scale	.03⅜	.03½	.03⅝	.03¾
PENNSYLVANIA—				
122-124	.0360		.0370	
124-126	.0375		.0375	
NEW YORK HARBOR—				
Wax (a.m.p.) in bags fully refined:				
120-122	.0420	.0430	.0420	.0430
123-125	.0440	.0460	.0440	.0460
125-127	.0445	.0470	.0445	.0470
128-130	.0480	.0495	.0480	.0495
130-132	.05	.0510	.05	.0510
133-135	.0545	.0570	.0545	.0570
135-137	.0570	.0595	.0570	.0595
124-126 crude scale	.03½	.03¾	.03½	.03¾
Petrolatum in barrels in carload lots:				
Dark green	.01⅞		.01⅞	
Amber	.02⅞	.03	.02⅞	.03
Extra amber	.03⅛	.03¼	.03⅛	.03¼
Lily white	.06¾	.06⅞	.06¾	.06⅞
Snow white	.07¾	.07⅞	.07¾	.07⅞
Cream	.05⅝	.05¾	.05⅝	.05¾
CHICAGO (f.o.b. switching district)*—				
122-124 wax	.0490	.0500	.0490	.0500
125-127 wax	.0515	.0525	.0515	.0525
127-129 wax	.0530	.0540	.0530	.0540
130-132 wax	.0590	.0600	.0590	.0600
132-134 wax	.0615	.0625	.0615	.0625

*Cents per pound on carlot orders in burlap bags of 225 lbs. approx. Add 3° F. a.m.p.

Export Prices

GASOLINE

GULF COAST—	June 12		June 5	
U. S. Motor	.04¼	.04⅜	.04¼	.04⅜
60-62 400	.04⅜		.04⅜	
61-63 390	.04½	.04⅝	.04½	.04⅝
64-66 375	.04⅝	.04¾	.04⅝	.04¾
LOS ANGELES, CALIF.—				
U. S. Motor grades:				
53-55 octane	.04	.04¼	.04	.04¼
55-65 octane	.04¼	.04½	.04¼	.04½
65-67 octane	.04½	.04¾	.04½	.04¾
67-69 octane	.04¾	.05	.04¾	.05
Above 69 octane	.05	.05¼	.05	.05¼
58-60 400 endpoint	.04¾	.05½	.04¾	.05½

KEROSENE

GULF COAST—				
41-43 prime white	.04⅛	.04¼	.04⅛	.04¼
41-43 water white	.04¼	.04⅜	.04¼	.04⅜
44 water white	.04⅜	.04½	.04⅜	.04½
LOS ANGELES, CALIF.—				
41-43 water white	.04¼	.04¾	.04¼	.04¾

LUBRICANTS

NEW YORK (f.a.s. in bbls.)—				
Cylinder Stocks:				
600 Warren E	.28	.29	.28	.29
600 S.R. unfiltered	.26	.26½	.26	.26½
650 S.R. unfiltered	.28	.28½	.28	.28½
600 flash S.R.	.29	.29½	.29	.29½
630 flash S.R.	.33½	.34	.33½	.34
Bright Stocks:				
8 color	.35	.36	.35½	.37
6½ plus color, in dilution	.33½	.34	.34½	

NEUTRAL OILS

200-3 color	.36	.37	.37	.38
150-3 color	.32	.33	.32	.33

PARAFFIN WAX (Fully Refined)

NEW YORK (prices per pound)—				
120-122 a.m.p.	.0405	.04¼	.0405	.04¼
123-125 a.m.p.	.0430	.0455	.0430	.0455
125-127 a.m.p.	.0440	.0465	.0440	.0465
128-130 a.m.p.	.04¾	.0490	.04¾	.0490
130-132 a.m.p.	.0495	.0505	.0495	.0505
133-135 a.m.p.	.0540	.0565	.0540	.0565
135-137 a.m.p.	.0565	.0590	.0565	.0590

Crude Oil Gravity Table

Degrees gravity—	Oklahoma and Kansas	North Texas, Central Texas and East Central Texas	North Louisiana and Arkansas	Gray County, Texas	Carson, Hutchinson, and Moore Counties, Texas	Conroe, Texas	Salt Creek, Wyo.	Gulf Coast, Texas, and Louisiana	Gulf Coast, Texas, and Louisiana	Jennings, Louisiana
	1	2	3	4	4	6	7	8	9	10
Below 20	....	....	....	....	....	....	....	$.82	$.82	....
20-20.9	....	....	....	....	....	....	....	.84	.84	....
21-21.9	....	....	....	....	....	....	....	.86	.86	....
22-22.9	....	....	....	....	....	....	....	.88	.88	....
23-23.9	....	....	....	....	....	....	....	.90	.90	....
24-24.9	....	....	....	....	....	....	....	.92	.92	....
Below 25	*$.76	....	....	....	....	....	....	....	....	$.70
25-25.9	*.78	....	....	....	....	....	....	.94	.94	72
26-26.9	*.80	....	....	....	....	....	....	.96	.96	.74
27-27.9	*.82	....	....	....	....	....	....	.98	.98	.76
28-28.9	*.84	....	....	....	....	....	....	1.00	1.00	.78
Below 29	.84	$.79	$.79	....	....	....	$.84	....	....	....
29-29.9	.86	.81	.81	....	....	....	.86	1.02	1.02	.80
30-30.9	.88	.83	.83	....	....	....	.88	1.04	1.04	.82
31-31.9	.90	.85	.85	....	....	....	.90	1.06	1.05	.84
32-32.9	.92	.87	.87	....	....	....	.92	1.08	1.06	.86
33-33.9	.94	.89	.89	....	....	....	.94	1.10	1.07	.88
34-34.9	.96	.91	.91	....	....	....	.96	1.12	1.08	.90
Below 35	....	....	....	$.79	$.69	....	....	....	....	....
35-35.9	.98	.93	.93	.81	.71	$1.09	.98	1.12	1.09	.92
36-36.9	1.00	.95	.95	.83	.73	1.11	1.00	1.12	1.10	.94
37-37.9	1.02	.97	.97	.85	.75	1.13	1.02	1.12	1.11	.96
38-38.9	1.04	.99	.99	.87	.77	1.15	1.04	1.12	1.12	.98
39-39.9	1.06	1.01	1.01	.89	.79	1.17	1.06	1.12	1.13	1.00
40 and over	1.08	1.03	1.03	.91	.81	1.19	1.08	1.12	1.14	1.02

Note.—Effective June 1, 1934, Texas Co. purchases Texas Panhandle crude on a sweet crude and sour crude basis. Panhandle sweet crude is paid for on a basis of the Gray County prices posted above, and Panhandle sour crude is paid for on a basis of Carson and Hutchinson County prices posted above.

*The following companies purchasing crude oil in Kansas or Oklahoma, or both, begin their price schedule: Below 25°, 76 cents; 25-25.9°, 78 cents, with 2 cents added for each degree upward to 40 and over at $1.08; Carter Oil Co., Magnolia Petroleum Co., Pure Oil Co., Rock Island Refining Co., Shell Petroleum Corp., Sinclair Prairie Oil Marketing Co., Skelly Oil Co., and Wilcox Oil & Gas Co. All others begin their schedules at below 29°, 84 cents, excepting Phillex Oil Co., which begins with below 31° at 88 cents.

Column 1.—Effective September 29, Texas Co. in Oklahoma; Stanolind Crude Oil Purchasing Co. in Kansas and Oklahoma; Anderson & Prichard, Inc., in Oklahoma; Bell Oil & Gas Co. in Oklahoma; Carter Oil Co. in Oklahoma and Kansas; Deep Rock Oil Co. in Oklahoma; Derby Oil Co. in Kansas; Globe Refining Co. in Oklahoma; Golden Rule Refining Co. in Kansas; Gypsy Oil Co. in Oklahoma and Kansas; Kanotex Refining Co. in Kansas; Magnolia Petroleum Co. in Oklahoma; Mid-Continent Petroleum Corp. in Oklahoma; National Refining Co. in Kansas and Oklahoma; Shell Petroleum Corp. in Kansas and Oklahoma; Sinclair Prairie Oil Marketing Co. in Kansas and Oklahoma; Texas Co. in Oklahoma; Tide Water Oil Co. in Oklahoma; Vickers Refining Co. in Kansas; Continental Oil Co. in Kansas and Oklahoma; Empire Pipe Line Co. in Oklahoma and Kansas; Phillex Oil Co. in Kansas and Oklahoma; Pure Oil Co. in Oklahoma; Skelly Oil Co. in Kansas. Effective September 29, by White Eagle Oil Corp. in Kansas; Oct. 1 by Barnsdall Refineries, Inc., in Oklahoma.

Column 2.—Effective September 29, by Texas Co., Stanolind Crude Oil Purchasing Co., Humble Oil & Refining Co., Sinclair Prairie Oil Marketing Co., Gulf Pipe Line Co., Magnolia Petroleum Co., Bell Oil & Gas Co., Continental Oil Co. Effective September 29, in the Van Pool, Van Zandt County, Pure Oil Co. posted below 29°, 84 cents, with 2 cents added for each degree up to 40 and over at $1.08.

Column 3.—Effective September 29, by Texas Co., Magnolia Petroleum Co., Gulf Refining Co. Effective December 22, Stanolind Oil & Gas Co. in Pine Island, Louisiana, and Marion County, Texas, posted below 29°, 79 cents, with 2 cents added for each degree up to 40 and over at $1.03. Effective March 17, 1934, by Standard Oil Co. of Louisiana and Louisiana Oil Refining Co. Starting with below 25°, 71 cents, adding 2 cents for each degree upward to 40 and over at $1.03.

Column 4.—Effective September 29, by Texas Co., Humble Oil & Refining Co., Magnolia Petroleum Co., Sinclair Prairie Oil Marketing Co., and H. F. Wilcox Oil & Gas Co. On same day Phillex Oil Co. posted below 31°, 71 cents, with 2 cents added for each degree up to 40 and over at 91 cents. Effective June 1, 1934, Texas Co. (see note above).

Column 5.—Effective September 29, by Texas Co., Humble Oil & Refining Co., Gulf Pipe Line Co., Magnolia Petroleum Co., Wilcox Oil & Gas Co., Continental Oil Co. On same day, Phillex Oil Co. posted below 31°, 61 cents, with 2 cents added for each degree upward to 40 and over at 81 cents. Effective June 1, 1934, Texas Co. (see note above).

Colum 6.—Effective September 29, by Humble Oil & Refining Co. and Tide Water Oil Co., and on September 30, by Texas Co. which on September 29 had posted a schedule of $1.07 to $1.12 with a 1-cent spread on each degree.

Column 7.—Effective September 29, by Stanolind Oil & Gas Co.

Column 8.—Effective September 29, by Humble Oil & Refining Co., Gulf Pipe Line Co., Shell Petroleum Corp., Pure Oil Co., Sinclair Prairie Oil Marketing Co. On October 2, Magnolia Petroleum Co. posted Lockport, Louisiana: 20-20.9°, 84 cents with 2 cents added for each degree upward to 34 and over at $1.12, and in Cameron Meadows and Iowa, Louisiana: Below 20°, 72 cents with 2 cents added for each degree up to 34 and over at $1.02. These prices were 2 cents higher on each degree than Magnolia prices posted on September 29. Effective September 29, Shell Petroleum Corp. posted in Iowa, Louisiana, district: Below 20° 70 cents, with 2 cents added for each degree upward to 34° and over at $1; and in Black Bayou and White Castle, Louisiana: Below 20°, 80 cents, with 2 cents added for each degree upward to 34° and over at $1.10.

Column 9.—Effective September 30, Texas Co. (On September 29, Texas Co. had posted a schedule of 2 cents on each degree, but changed it on September 30.)

Column 10.—Effective September 29, by Louisiana Oil Refining Co.

(California Crude Oil Prices on Page 31)

Crude Oil Prices

Oklahoma, Kansas, North Central and East Central Texas

East Texas	$1.00
Stratman, Kans. (Sept. 29, 1933)	1.08
Corsicana (heavy) (June 17, 1933)*	.30
Other fields	(See gravity table)

Note—In East Texas, effective September 29, 1933, by Texas Co., Stanolind Crude Oil Purchasing Co., Humble Oil & Refining Co., Shell Petroleum Corp., Gulf Pipe Line Co., Tide Water Oil Co., Sinclair Prairie Oil Marketing Co., Magnolia Petroleum Co., Sun Oil Co., Panola Pipe Line Co., and Empire Oil & Refining Co.

*Magnolia Petroleum Co.

West Texas

Crane, Upton, Crockett, Howard Glasscock, Mitchell (Sept. 29, 1933)	$.70
Ector, Winkler and Pecos Counties and Lea County, New Mexico (Sept. 29, 1933)	.75
Pecos County, Yates shallow pool (Sept. 29, 1933)*	.65
Jones and Fisher Counties	See gravity table.

Note—Effective September 29, 1933, by Humble Oil & Refining Co., Texas Co., Gulf Pipe Line Co., Shell Petroleum Corp., Magnolia Petroleum Co., and by Stanolind Oil & Gas Co. in Winkler County, Texas.

*Shell Petroleum Corp.

Gulf Coast

Grade A and Grade B specifications discontinued by leading buyers	(See gravity table)
Tomball (see note)*	$1.15
Livingston (Sept. 29, 1933)†	1.00
Cleveland (Jan. 11, 1934)	1.00
Greta (Sept. 29, 1933)	.85
Refugio, light	(See gravity table)
Refugio, heavy (Sept. 29, 1933)‡	.85
Markham and High Island	(See Gulf Coast gravity table)
Conroe	(See Conroe gravity table)

Note—Tomball, effective September 29, by Humble Oil & Refining Co., and October 2, by Magnolia Petroleum Co., and November 10, by Stanolind Oil & Gas Co.

*Greta posted by Texas Co. †Shell Petroleum Corp. ‡Refugio heavy, by Humble Oil & Refining Co. Cleveland (Liberty County), posted by Magnolia Petroleum Co.

South Central and Southwest Texas

(See note below table)

Darst Creek	$.87
Mirando	.80
Luling (Sept. 29, 1933)	.75
Pettus	1.05
Salt Flat	.87
Lytton Springs (Sept. 29, 1933)	.95
Duval County (Sept. 29, 1933)	.80
Saxet	.85

Note—Effective on September 29 by Humble Oil & Refining Co., in Darst Creek, Mirando, Pettus, Salt Flat and Saxet. Effective September 29 in Darst Creek by Gulf Pipe Line Co. and Texas Co. Effective October 2 by Magnolia Petroleum Co. Effective in Pettus and Salt Flat on September 29 by Humble Oil & Refining Co. and Gulf Pipe Line Co. Luling and Lytton Springs by Magnolia Petroleum Co. Duval County by Texas Co. Saxet, effective September 29, by Humble Oil & Refining Co. and Texas Co.

(Continued on Page 31)

TANK WAGON MARKETS

Quotations for gasoline and kerosene in United States, as furnished by the larger marketing concerns, include taxes

June 12, 1934

Taxes

The gasoline quotations given in the following tables include the 1 cent Federal tax, as well as state, county and city taxes. The gasoline quoted is the regular or standard grade. In most marketing areas a third grade and a premium grade are also available.

Discounts

Under the standard form of commercial consumer contract which went into effect March 1, 1934, save in California, Oregon, Washington, Arizona and Nevada, a discount of 1 cent a gallon off tank wagon, or 2 cents a gallon off retail prices, is permitted for purchases running between 3,000 and 10,000 gallons a month, and 2 cents a gallon off tank wagon, or 4 cents a gallon off retail prices, for purchases in lots of more than 10,000 gallons a month. The minimum delivery is 25 gallons.

Rocky Mountain District

CONTINENTAL OIL CO.

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Denver, Colo.	18 0	20 0	6.0	10.0
Pueblo	18 0	20.0	6.0	12.0
Grand Junction	20.5	22.5	6.0	15 0
Casper, Wyo.	18.0	20.0	5.0	11.5
Cheyenne	18 0	20.0	5.0	13 0
Butte, Mont.	21 0	23.0	5.0	17 5
Billings	21.0	23.0	6 0	16.5
Helena	22.5	24 5	6.0	17.5
Great Falls	20.0	22.0	6.0	17.5
Salt Lake, Utah	21 0	23.0	5.0	16 0
Boise, Idaho	22.0	24.0	6 0	18.0
Twin Falls	22.0	24.0	6 0	18.0
Albu'que, N. M.	19 5	21.5	*7.0	13.0

*One-cent city tax.

Effective March 1, 1934, discount to dealers with or without contract throughout Continental territory: Undivided dealer discount off service station price, 4 cents; divided dealer accounts, 3½ cents.

Standard Oil Co. (Indiana)

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Chicago	14.3	16.3	4.0	9 7
Decatur, Ill.	16 0	18 0	4.0	10.2
E. St. Louis	16 0	14.5	4.0	9.5
Joliet	14.2	16 2	4.0	10.2
Peoria	16.7	16.7	4.0	10.2
Quincy	16.6	14.5	4.0	10 0
Davenport, Ia.	16.6	18.6	4 0	10.1
Des Moines	16 6	18.6	4 0	10.1
Mason City	16.6	17.6	4 0	9.3
Sioux City	12.9	12.9	4.0	9.7
Duluth, Minn.	17 2	19.2	4.0	10.4
Mankato	16.8	16 8	4.0	10.3
Minneapolis	15.4	17.4	4.0	10.4
LaCrosse, Wis.	18 3	20.3	4.8	10 8
Green Bay	17.7	19.7	5.0	10 2
Milwaukee	17.1	19.1	5.0	9.7
Madison	17.4	19.4	5.0	9.9
Detroit, Mich.	17.0	19.0	4.0	10 5
Grand Rapids	16 7	18.7	4.0	10.2
Saginaw	17.0	19.0	4.0	10.5
Evansville, Ind.	17.7	19.7	5.0	10.0
Indianapolis	17.9	19 9	5.0	10.2
South Bend	18 2	20.2	5.0	10.5
Fargo, N. Dak.	17.9	19 9	4.0	12 1
Huron, S. Dak.	18.8	20.8	5.0	11 4
Sioux Falls	18.4	20.4	5.0	10 9
Kans. C., Mo.*	15 0	15.0	4 0	9.2
Springfield	15.1	17.1	3.5	9.1
St. Louis	15.0	17.0	3.5	8 7
St. Joseph*	15 3	15.0	4.0	8.8
Wichita, Kans.	14.6	16.6	4.0	10 2
Bartlesville, Ok.	16 0	18.5	5.0	10.5

*State tax 2 cents, 1-cent city tax and 1-cent Federal tax.

Discounts to dealers, effective March 1, 1934: Undivided accounts, 4 cents a gallon on Red Crown Ethyl and Standard Red Crown, divided accounts, 3½ cents a gallon on Red Crown Ethyl and Standard Red Crown.

Stanolex Furnace Oil in Chicago

Effective May 16, 1934, f.o.b. Chicago, tank wagon prices: No. 1 (36-40 lt. stw. zero), under 150 gallons, 8¼ cents; No. 2 (30-34 stw. zero), under 150 gallons, 7¾ cents; No. 3 (22-26 zero), under 150 gallons, 7½ cents; No. 4 (12-16 zero), under 400 gallons, 6 cents; viscosity of No. 4, 90-115 at 100° F.; No. 5, under 400 gallons, 5¾ cents. For deliveries above stated quantities deduct 1 cent.

Naphtha

	Tank wagon*
Oleum spirits	16 8
V.M.&P. naphtha	18 0
Cleaners' naphtha	18 0
Stanisol	15.0

*Prices include 3-cent Illinois tax, but not 1-cent Federal tax.

Prices f.o.b. Chicago, September 13, 1933. Each of above prices subject to discount of 1 cent per gallon for 150-gallon lots if covered by contracts.

Southern District

STANDARD OIL CO. (KENTUCKY)

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Atlanta, Ga.	20.0	22.0	7.0	14.5
Augusta	20.0	22.0	7.0	14.5
Macon	20.0	22.0	7.0	14.5
Savannah	20.0	22.0	7.0	14.0
Birm'ham, Ala.	21.5	23.5	8.0	12.0
Mobile	20 5	22 5	8.0	12.0
Montgomery	22 5	24.5	8.0	15.0
Jackson, Miss.	19.5	21.5	7.0	13.0
Vicksburg	16.5	18.5	7.0	14.0
Jack'ville, Fla.	20 0	22.0	8.0	11.5
Miami	20 0	22 0	8.0	13 5
Pensacola	18 0	20.0	8.0	13.5
Tampa	20.0	22.0	8.0	12.5
Lexington, Ky.	18 5	20 5	6 0	11 5
Covington	17.5	19.5	6.0	11.5
Louisville	18.0	20.0	6.0	11.5
Paducah	14.5	16.5	6.0	11.0

In addition to the state tax of 4 cents on gasoline, Montgomery has city and county tax of 2 cents on gasoline and one-half cent on kerosene. Kerosene prices in Georgia and Mississippi include 1 cent state tax; in Alabama, an inspection fee of one-half cent on kerosene and one-fortieth cent on gasoline; in Florida an inspection fee of one-eighth cent on kerosene and gasoline. To Pensacola, Mobile and Birmingham state taxes on gasoline add 1 cent city tax.

Southwestern District

MAGNOLIA PETROLEUM CO.

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Dallas, Tex.	17.0	19.0	5.0	6.0
Fort Worth	17.0	19.0	5.0	7.0
Houston	16.0	18.0	5.0	8.5
San Antonio	17.0	19 0	5.0	8.5
El Paso	18.0	20 0	5.0	11.0
Muskogee, Ok.	16 0	18.0	5.0	7.5
Okla. City	13.0	15.0	5.0	8 5
Tulsa	16 0	18.0	5.0	8.5
Ft. Smith, Ark.	16.1	18.1	5.0	8.0
Little Rock	19 1	21.1	7.5	9.0
Texarkana	17.0	19.0	5.0	7.0

Atlantic Coast District

STANDARD OIL CO. OF NEW JERSEY

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Atl'tic City, N.J.	19.0	18.5	4 0	10.0
Newark	18.3	17.8	4.0	9.5
Annapolis, Md.	19 6	19.1	5.0	10.0
Baltimore	19.1	18.6	5.0	9.5
Cumberland	20.6	20.1	5.0	12.7
Wash'g'n, D. C.	17.3	16 8	3.0	11.5
Danville, Va.	21 7	21.2	6 0	12.9
Norfolk	20.2	19.7	6.0	11.3
Petersburg	21.0	20 5	6.0	11.4
Richmond	20 6	15.6	6.0	11.7
Roanoke	21.8	15 4	6.0	12.9
Charls'n, W. Va.	20.0	19.5	5.0	12.6
Parkersburg	19.3	15 4	5 0	11.2
Wheeling	20 0	19 5	5.0	12.2
Charlotte, N. C.	23.4	22 9	7.0	13.5
Hickory	23.7	23.0	7 0	13.7
Mt. Airy	23 7	23.2	7.0	13.8
Raleigh	22 2	22.5	7.0	13.2
Salisbury	23 5	23.0	7.0	13.6
Charleston, S. C.	21.2	20.7	7.0	11.3
Columbia	23.0	22.0	7.0	13.2
Spartanburg	23 4	21.5	7.0	13 5

Price basis to dealers: Divided dealers at dealer price, which is 2½ cents above tank car; undivided dealers at regular price less one-half cent. Discount for kerosene, 1 cent off tank wagon price for 25 gallons or more under contract (contract not necessary in Baltimore) except in New Jersey, where no discount is given.

Nebraska

STANDARD OIL CO. OF NEBRASKA

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Omaha	17.0	19.0	5.0	9.0
McCook	17.7	18.4	5.0	7.4
Norfolk	17.0	17.0	6.0	9.0
North Platte	17.8	18.0	5.0	9.0
Scottsbluff	18.5	19.3	5.0	9.0

Note—Discount to dealers, including any rentals under lease and agency agreements: Undivided accounts, Standard Red Crown and Red Crown Ethyl Gasoline 4 cents, Reliance (third brand) 3 cents, under service station price. Divided accounts, Standard Red Crown Ethyl Gasoline 3½ cents, Reliance (third brand) 2½ cents, under service station price. Discounts to consumers covered only by form CD-1, official commercial consumer contract.

Central South District

STANDARD OIL CO. OF LOUISIANA

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
N. Orleans, La.	20 8	16.5	*7.0	†10.0
Baton Rouge	20 2	19.7	6.0	†12.0
Alexandria	21.1	20.6	*7.0	†10.0
Lafayette	21.3	20.8	*7.0	†12.0
Lake Charles	21.2	20.7	*7.0	†12.0
Shreveport	19 0	18.5	6.0	†12.0
Knoxville, Tenn.	24.7	23.2	8.0	13.0
Memphis	23.1	16.0	8.0	10.5
Chattanooga	24 5	24.0	8.0	12.0
Nashville	24.0	16.0	8.0	11.0
Bristol	24.5	19.0	8.0	14.0

*Includes city tax of 1 cent. †Louisiana kerosene prices include 1-cent state tax.

Price bases to dealers: Divided dealers at dealer price, which is 2½ cents above tank car; undivided dealers at dealer price less one-half cent.

Pacific Coast Territory

STANDARD OIL CO. OF CALIFORNIA*

	Gasoline: Tank wagon†	Gasoline: Posted retail	Gasoline: Incl'ds tax of	Kero. tank wagon
San Francisco	14.0	17.0	4.0	12.5
Los Angeles	12.0	15.0	4.0	12.5
Fresno, Calif.	14.5	17.5	4.0	14.0
Phoenix, Ariz.	18.5	21.5	6 0	‡16.0
Reno, Nev.	19 5	22.5	5.0	15.5
Portland, Ore.	19 0	22.0	6.0	13.5
Seattle, Wash.	19 0	22 0	6.0	13.5
Tacoma	19.0	22.0	6.0	13.5
Spokane	22.0	25.0	6.0	18.0

*Retail prices posted by Standard Stations, Inc., a subsidiary.

†Prices are at company's plant or depots, as company does not operate stations. A 4-cent per gallon discount is given dealers and customers taking tank wagon lots except in Phoenix where the discount is 1 cent.

‡Includes 5 cents state tax.

Pennsylvania, Delaware and Part of New England

ATLANTIC REFINING CO.

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Philadelphia, Pa.	15.5	17 5	4 0	10.0
Pittsburgh	16.0	18.0	4 0	10.0
Allentown	15.5	17.5	4.0	10.0
Erie	16.0	18.0	4.0	9.0
Scranton	16 0	18 0	4.0	10.0
Altoona	16 0	18.0	4 0	10.0
Dover, Del.	16.0	18 0	4 0	10.0
Wilmington	16.0	18.0	4.0	9 0
Springf'd, Mass.	15 5	17.5	4 0	8.75
Worcester	16 5	18 5	4.0	9.0
Hartford, Conn.	15.4	17.4	3.0	8.5
New Haven	15.2	17.2	3.0	8.5
Providence, R.I.	13 5	15.5	3 0	8.5

Note—Tank wagon prices are those applicable to consumers purchasing lots of 100 or more gallons in one delivery.

New York and Part of New England

STANDARD OIL CO. OF NEW YORK

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Albany, N. Y.	17.1	18.1	4.0	9.0
Met. New York	16.5	17.5	4.0	8.5
Buffalo	17.5	18.5	4.0	9 0
Rochester	17.5	18.5	4.0	9.25
Syracuse	17.0	18.0	4.0	9.25
Boston, Mass.	16.5	17.5	4.0	8.5
Portland, Me.	18.2	19.2	5.0	8.75
Manch't'r N. H.	19.2	20 2	5.0	9.0
Burlington, Vt.,	19.8	20.8	5.0	9.75

Commercial consumers allowed 2 cents discount below service station prices in accordance with CD-1 of oil industry's code.

Ohio

STANDARD OIL CO. OF OHIO

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Ohio points	17.5	19.5	5.0	*13.5

*Includes state tax of 1 cent, effective July 22.

Canada*

IMPERIAL OIL, LTD.

Imperial 3-Star Gasoline

	Gasoline: Tank wagon	Gasoline: Service station	Gasoline: Incl'ds tax of	Kero. tank wagon
Hamilton, Ont.	†21.5	24.5	6.0	17.5
Toronto, Ont.	†21.5	24 5	6.0	17.5
Brandon, Man.	30.3	32.3	7.0	21.8
Winnipeg, Man.	28.7	31.7	7.0	20.2
Regina, Sask.	29.0	32.0	6.0	21.5
Saskatoon, Sask.	31 8	34.8	6.0	24.3
Edmonton, Alta.	31 2	34.2	6.0	23.7
Calgary, Alta.	28.5	31.5	6.0	21.0
Vancouver, B.C.	†28.0	31.0	7.0	24.0
Montreal, Que.	24.0	27.0	6.0	17.0
St. John, N.B.	27.5	31.5	8.0	21.0
Halifax, N. S.	26.0	30.0	6.0	21.0

Imperial gallon used in Canada. †Governed by service station price.

Maritime provinces, all dealers 4 cents off service station price. All other provinces, open dealers 3 cents off service station price and 1 cent additional to 100 per cent accounts.

Retail Price Changes

Regular-Grade Gasoline and Kerosene

Standard Oil Co. of New Jersey advanced the gasoline service station price 1 cent on May 31 in Hickory, N. C., to 23 cents. On the same date the gasoline station price was advanced one-half cent in Raleigh, N. C., to 22.5 cents. On June 1 the gasoline station price was reduced .4 cent at Parkersburg, W. Va., to 15 cents. On June 4 the gasoline station price was reduced one-half cent at Columbia, S. C., to 22 cents. On the same date the station price was also reduced one-half cent in Spartan, S. C., to 21.5 cents.

Standard Oil Co. (Indiana) reduced the gasoline tank wagon 2 cents and the station price 1 cent in Chicago on June 7 to 14.3 and 16.3 cents respectively.

Standard Oil Co. (Nebraska) reduced the kerosene price 2 cents in Scottsbluff to 9 cents. On June 4 the kerosene price at McCook was reduced 1.6 cent to 7.4 cents. On June 6 readjustments were made in the gasoline market, the new postings being shown in the accompanying table.

Standard Oil Co. of Louisiana advanced the gasoline tank wagon and station prices one-half cent throughout its territory on May 31 except at subnormal points.

Standard Oil Co. of Kentucky reduced the gasoline tank wagon and station prices at Vicksburg, Miss., on June 1 to 17.5 and 19.5 cents. On June 3 a further reduction of 1 cent was made, making the new prices 17.5 and 19.5 cents, respectively. On June 4 kerosene was posted at 13 cents in Jackson, Miss.

Gasoline Prices Are Slipping Downward

(Continued from Page 22)

these two groups of products. Until jobbers start buying distillates for storage, which usually comes in July, prices will probably act in sympathy with the general refinery market. With refiners running more crude oil this month than in previous months this year and because the demand for cracking stock has fallen off, the immediate future of the gas oil market is not bright.

Lubricants and Wax

Bright stocks and neutrals continued to move to consuming points at a rate equal to production. Delayed orders were common but there was no thought of advancing prices at this time because of the slightly lower prices posted for Pennsylvania bright stocks.

Wax prices were reduced and trading was restricted to old commitments.

CARDSTON GAS PROJECT

CARDSTON, Alberta, June 9.—Application has been made by Cardston and Moose Jaw interests for approval of a natural gas franchise for the town of Cardston. The men behind the project are planning to drill for gas this summer on the Cardston structure.

VIRGINIA INQUIRY

RICHMOND, Va., June 11.—Governor George C. Peery has asked D. R. Hunt, state NRA director to assist in an inquiry into wide variations in the price of gasoline which have developed out of price wars in the Shenandoah Valley and other sections of the State.

Texas Company of Canada Adds Marketing Facilities

EDMONTON, Alberta, June 9.—An expansion program involving the expenditure of more than $300,000 has been launched in Alberta and Saskatchewan by the Texas Co. of Canada, Ltd., according to an announcement by C. D. Meltabarger, general manager.

The company is building bulk and service stations at many points in the two western provinces, plans and specifications by the company's architects being made to conform to the municipal building requirements while the type of construction is harmonized with the surroundings.

Bulk plants will be constructed at Vegreville, Vermilion, Lloydminster, North Battleford, Banff, Bassano and Swift Current. Some of these stations will be in operation by the middle of June. The program also provides for erection of service stations at these points, as well as at Gleichen, Brooks and Cardston in Alberta and at Miota, Gull Lake, Waskaseu and Shellbrook, Saskatchewan.

Negotiations with the Dominion government for the purchase of property in Prince Albert National Park have been concluded, and at Waskaseu in this park a site is already being cleared.

NEW SOHIO PUBLICATION

June 18 marks the initial issue of the new Standard Oil Co. of Ohio bi-monthly, semitechnical publication, the "Sohio Sales Engineering Bulletin, edited by D. F. Anguish of the sales engineering department in Cleveland.

The publication will be mailed direct to the homes of more than 5,000 Sohio employes, and will contain sales building information as well as technical material.

Public Is Paying $700,000,000 in State and Federal Gasoline Taxes Annually

Taxes upon motor fuel in 1933 cost the American public more than $700,000,000, the largest gasoline tax bill ever paid. Reports received by the American Petroleum Industries Committee from the U. S. Bureau of Public Roads show that 1933 state gasoline tax collections were $518,195,712 net. Federal gasoline taxes in 1933 amounted to $181,125,988 additional. The total of state and Federal levies was $699,321,700. County and/or city gasoline taxes, collected in Florida, Missouri, Louisiana, Mississippi, New Mexico, and Wyoming were estimated to have lifted the total gasoline tax bill above $700,000,000.

State gasoline tax collections in 1933 not only exceeded estimates based upon motor fuel consumption, but were greater by $5,148,473 than the $513,047,230 net collections of 1932. Taxed gasoline gallonage, however, showed a decline to 14,224,321,270 gallons in 1933 from 14,250,173,296 gallons in 1932.

Since there was only one increase in state gasoline tax rates during 1933, Oregon's tax rate rising to 5 cents per gallon from 4 cents, the gain in collections in the face of a decline in taxed gallonage is ascribed to more complete collection of tax revenues, rigid enforcement of tax laws to prevent gasoline bootlegging and tax evasion, and the amendment of gasoline tax laws to prevent losses through fraudulent exemptions and other sources.

New York and California maintained their positions as the largest collectors of state gasoline taxes. New York collected $43,344,695 against $42,473,687 in 1932. California collected $35,217,162 against $36,128,854.

AUTO SALES UP 88 PER CENT

The May output of motor vehicles amounted to 336,657 units, according to an estimate released by the National Automobile Chamber of Commerce. On the basis of this estimate the month's production represented a decrease of 11 per cent under the preceding month and a gain of 48 per cent over May, 1933. Five months' production was estimated at 1,477,770 units—an increase of 88 per cent over the corresponding period last year.

The estimate which is based upon reports of factory shipments is summarized below:

May 1934	336,657
April, 1934	378,983
May, 1933	227,743
Five months, 1934	1,477,770
Five months, 1933	784,978

OIL BURNER CHART

The grade of fuel oil recommended for use in 324 different models of oil burners is listed in a new chart prepared by the Fuel Oil Journal of New City City. It shows that 55 per cent of the burners in use today are listed, either by the Underwriters' Laboratories, Chicago, or by their manufacturers, to burn No. 3 fuel oil, compared with 19 per cent that burn No. 1, 13.6 per cent that burn No. 2, 6.3 per cent that burn No. 4, 3.5 per cent that burn No. 5, and 2.3 per cent that burn No. 6.

The chart, which includes a table giving the commercial standard fuel oil specifications, covers all the domestic and commercial burners being sold today; also many of those whose manufacturers have discontinued making burners. In addition to the grade of oil, the chart lists the mechanical features for each burner.

Sinclair Awarded Navy Contract Fourth Time

Sinclair Refining Co. has been awarded the 1934-1935 contract for lubricating oils to be used by the navy. This is the fourth successive year that this award has been made to the Sinclair company.

The award includes the navy's requirements at all Atlantic ports and the requirements of the army and 12 other departments of the government in 42 states, the District of Columbia and the Panama Canal.

While the award covers initially nearly two million gallons of lubricating oil, the proposal states that the "uncertain and varying needs of the Government make it impossible to determine the quantity that may be required."

In addition to the navy's supply covered by this award many other bureaus of the government purchase under the same contract including the Department of Agriculture, Department of Commerce, Interior Department, Interstate Commerce Commission, Coast Guard, Division of the Treasury Department, United States Army including the Engineer Corps, Ordinance Department, Quartermaster Corps and Signal Corps. It also includes executive departments and other establishments of the government in Washington, D. C., and nearby points.

STATE	GROSS TAX ASSESSED PRIOR TO DEDUCTION OF REFUND	EXEMPTION REFUND: (DEDUCTED FROM GROSS TAX)	NET TAX EARNING ON MOTOR VEHICLE FUEL 1/	OTHER RECEIPTS, UNDER TAX LAW (LICENSES, ETC.)	GRAND TOTAL EARNING (TAX AND OTHER RECEIPTS)	DISPOSITION OF GRAND TOTAL EARNING ACCORDING TO LAW: COLLECTION AND ADMINISTRATION COST 2/	CONSTRUCTION AND MAINTENANCE ON RURAL ROADS: STATE HIGHWAY 3/	CONSTRUCTION AND MAINTENANCE ON RURAL ROADS: LOCAL ROADS 3/	STATE AND COUNTY ROAD BOND PAYMENT 4/	FOR CITY STREETS	FOR OTHER THAN HIGHWAY PURPOSES	TAX RATE, 1933: CENTS PER GALLON JAN. 1	CENTS PER GALLON DEC. 31	DATE OF RATE CHANGE	GASOLINE, OR OTHER FUEL FOR MOTOR VEHICLES, TAXED: NET GALLONS TAXED	PER CENT CHANGE 5/	STATE
ALABAMA	$ 6 033.141	-	$ 6.033.141	$ 1	$ 6.033.142	$ 17.671	$ 2.508.119	$ 4.001.673	$ 1.505.679	-	-	6	6	-	133.885.679	- 1.86	ALABAMA
ARIZONA	3.226.831	$ 547.799	2.679.032	225	2.679.257	6/ -	1.607.644	928.060	-	-	7/ $ 147.953	5	5	8/ 3/2	53.580.633	- 7.63	ARIZONA
ARKANSAS	6.543.025	553.996	5.989.429	8.861	5.998.290	220.147	1.376.222	639.566	9/ 3.446.153	-	10/ 316.202	6	11/ 6	-	114.791.930	33.95	ARKANSAS
CALIFORNIA	38.774.555	3.557.393	35.217.162	-	35.217.162	12/ 82.134	22.817.380	12.036.373	-	$ 296.142	13/ 16.133	3	3	-	1.173.205.406	- 8.52	CALIFORNIA
COLORADO	6.012.639	687.643	5.324.996	-	5.324.996	61.234	3.680.633	1.421.216	-	157.913	-	4	4	-	133.124.908	- 2.64	COLORADO
CONNECTICUT	4.942.513	190.883	4.811.630	14/ 46.394	4.857.024	14/ -	4.857.024	-	-	-	-	2	2	-	240.581.476	2.71	CONNECTICUT
DELAWARE	1.177.893	50.593	1.127.330	2.247	1.129.577	15/ -	850.873	-	16/ 278.704	-	-	3	3	-	37.577.673	3.41	DELAWARE
FLORIDA	14.249.308	-	14.249.308	43.565	14.292.873	21.079	6.106.846	-	17/ 6.106.846	-	18/ 2.058.102	7	7	-	203.561.529	- 1.79	FLORIDA
GEORGIA	12.634.513	-	12.634.513	-	12.634.513	63.173	5.380.894	2.095.223	-	-	19/ 2.095.223	6	6	-	210.575.216	5.83	GEORGIA
IDAHO	2.535.966	253.596	2.282.370	796	2.283.166	11.868	2.055.048	-	-	-	-	5	5	-	45.647.396	0.20	IDAHO
ILLINOIS	29.129.584	1.298.573	27.833.011	-	27.833.011	133.387	18.466.409	5.468.109	-	-	21/ 3.765.096	3	3	-	927.767.039	- 3.20	ILLINOIS
INDIANA	17.480.916	1.207.304	16.283.202	5.444	16.288.646	71.077	8.108.784	6.487.028	-	1.621.757	-	3	3	-	407.080.056	- 2.73	INDIANA
IOWA	10.067.048	294.705	9.772.343	-	9.772.343	29.583	3.374.705	3.858.045	22/ 2.100.000	-	-	3	3	-	312.411.942	4.48	IOWA
KANSAS	10.258.397	2.526.578	7.731.819	39.550	7.771.369	23/ 179.494	5.779.180	1.800.000	-	-	24/ 12.735	3	3	-	257.727.287	4.20	KANSAS
KENTUCKY	8.314.699	-	8.314.699	1.358	8.316.017	48.246	8.267.771	-	-	-	-	5	5	-	166.293.182	1.36	KENTUCKY
LOUISIANA	8.155.482	46	8.155.436	-	8.155.436	62.000	2.361.222	-	4.100.825	-	25/ 1.631.389	5	26/ 5	-	163.138.863	- 1.73	LOUISIANA
MAINE	4.295.046	185.079	4.080.371	27/ 46.269	4.126.640	16.074	2.055.283	2.055.283	-	-	28/ -	4	4	-	102.059.277	- 1.00	MAINE
MARYLAND	7.588.176	380.427	7.207.749	-	7.207.749	17.300	5.384.741	1.423	1.672.985	29/ 125.320	-	4	4	-	180.193.738	3.90	MARYLAND
MASSACHUSETTS	16.709.793	332.441	16.377.352	-	16.377.352	90.000	6.517.673	2.073.592	313.628	30/ 7.422.459	-	3	3	-	546.511.726	- 0.86	MASSACHUSETTS
MICHIGAN	20.460.257	1.001.799	19.458.458	26.662	19.485.120	109.502	2.303.607	14.046.349	3.000.000	-	31/ 26.862	3	3	-	648.615.259	- 4.76	MICHIGAN
MINNESOTA	11.326.991	1.312.134	10.014.857	32/ 198.778	10.213.636	33/ -	6.425.314	3.600.000	-	-	34/ 188.322	3	3	-	333.828.560	0.14	MINNESOTA
MISSISSIPPI	6.721.859	920.134	5.801.725	35/ 299.223	6.100.948	23.311	2.874.459	2.573.341	495.192	-	36/ 134.845	6	6	-	98.695.407	- 0.04	MISSISSIPPI
MISSOURI	9.317.610	236.475	9.081.135	-	9.081.135	55.534	9.025.201	-	-	-	-	2	2	-	454.056.751	1.47	MISSOURI
MONTANA	3.415.209	661.806	2.753.403	-	2.753.403	31.512	2.660.591	-	69.200	-	-	5	5	-	55.036.046	2.27	MONTANA
NEBRASKA	7.792.812	86.591	7.706.261	-	7.706.261	56.411	5.095.848	2.258.802	-	295.400	-	4	4	-	192.656.526	- 1.52	NEBRASKA
NEVADA	825.176	129.523	695.653	-	695.653	37/ -	695.653	-	-	-	-	4	4	-	17.391.339	- 4.33	NEVADA
NEW HAMPSHIRE	2.418.103	68.254	2.349.849	-	2.349.849	38/ -	1.762.387	-	587.462	-	-	4	4	-	58.746.216	- 10.95	NEW HAMPSHIRE
NEW JERSEY	20.963.377	4.566.991	16.397.386	39/ 73.261	16.470.647	52.950	2.438.310	6.396.475	2.296.000	-	40/ 5.287.412	3	3	-	548.579.941	- 1.32	NEW JERSEY
NEW MEXICO	2.430.319	184.809	2.245.510	16.382	2.281.892	33.995	898.099	-	1.349.952	-	-	5	5	-	91.310.187	5.31	NEW MEXICO
NEW YORK	44.425.847	1.081.152	43.344.695	48.251	43.392.946	41/ 140.780	21.646.458	5.761.145	1.440.286	42/ 14.404.277	43/ -	3	3	-	1.446.837.830	- 2.71	NEW YORK
NORTH CAROLINA	14.974.123	204.521	14.769.602	3.680	14.773.282	6.099	4.952.913	2.931.286	44/ 6.540.385	-	45/ 342.599	6	6	-	246.160.036	6.23	NORTH CAROLINA
NORTH DAKOTA	2.787.725	863.777	1.923.951	879	1.924.830	25.000	1.266.553	633.277	-	-	-	3	3	-	64.131.714	4.81	NORTH DAKOTA
OHIO	35.740.548	1.800.567	33.939.981	-	33.939.981	153.028	15.426.893	7.640.678	-	5.730.509	46/ 4.988.873	4	4	7/22	834.020.083	- 2.18	OHIO
OKLAHOMA	10.084.685	-	10.084.685	13.960	10.098.645	84.847	4.994.942	2.419.183	-	-	47/ 2.599.673	4	4	-	251.617.119	4.18	OKLAHOMA
OREGON	7.282.245	938.354	6.343.891	-	6.343.891	20.616	4.604.599	-	15/ 1.718.676	-	-	4	5	4/9	175.619.611	- 3.03	OREGON
PENNSYLVANIA	31.353.940	614.823	30.739.117	48/ 320.261	31.059.378	49/ 349.547	22.141.675	5.110.747	16/ 3.457.208	-	-	3	3	-	1.026.637.243	1.48	PENNSYLVANIA
RHODE ISLAND	2.004.038	123.066	1.880.972	3.710	1.884.682	50/ -	1.246.587	-	302.000	-	51/ 336.115	2	2	-	94.048.613	1.45	RHODE ISLAND
SOUTH CAROLINA	6.716.510	37.188	6.679.325	-	6.679.326	52/ -	1.928.367	1.113.221	53/ 3.641.738	-	-	6	6	-	111.322.101	7.30	SOUTH CAROLINA
SOUTH DAKOTA	3.849.544	54/ 503.529	55/ 3.346.015	-	3.346.015	41.399	1.900.047	-	-	-	56/ 1.404.569	4	4	-	76.382.221	5.80	SOUTH DAKOTA
TENNESSEE	12.979.882	-	12.979.882	-	12.979.882	154.721	3.481.115	57/ 3.867.548	58/ 5.496.498	-	-	7	7	-	189.526.887	6.52	TENNESSEE
TEXAS	31.430.379	2.951.089	28.479.290	-	28.479.290	201.122	14.139.114	-	59/ 7.089.957	-	60/ 7.089.957	4	4	-	711.983.752	1.25	TEXAS
UTAH	2.189.065	67	2.188.998	716	2.189.714	4.241	2.185.473	-	-	-	-	4	4	-	54.726.960	0.79	UTAH
VERMONT	1.766.152	-	1.766.152	-	1.766.152	-	1.321.102	230.000	215.050	-	-	4	4	-	44.153.789	- 5.79	VERMONT
VIRGINIA	11.679.511	597.471	11.082.040	-	11.082.040	25.000	7.739.928	3.317.112	-	-	-	5	5	-	221.640.804	2.52	VIRGINIA
WASHINGTON	11.852.828	989.614	10.863.214	-	10.863.214	22.688	7.971.489	61/ 2.000.000	-	-	62/ 869.057	4	4	-	217.264.282	- 1.66	WASHINGTON
WEST VIRGINIA	5.149.595	229.931	4.919.664	8.064	4.927.728	11.506	1.799.477	-	3.156.745	-	-	4	4	-	122.991.600	- 0.45	WEST VIRGINIA
WISCONSIN	16.599.578	1.430.152	15.169.426	-	15.169.426	29.705	9.295.610	63/ 3.992.249	17/ 1.284.000	107.862	18/ 500.000	4	4	-	379.235.644	1.48	WISCONSIN
WYOMING	1.405.415	-	1.405.415	-	1.405.415	-	829.042	351.324	18/ 225.049	-	-	4	4	-	35.135.367	- 0.90	WYOMING
DIST. OF COL.	2.097.257	14.911	2.082.346	-	2.082.346	-	-	-	-	2.082.346	-	2	2	-	104.117.897	2.30	DIST. OF COL.
TOTAL	-	-	518.195.712	1.207.738	519.403.450	2.727.801	277.517.371	111.109.158	58.972.767	13.334.180	55.742.173	WEIGHTED AVERAGE RATE, 3.65 CENTS			14.224.321.270	- 0.18	TOTAL

NOTES: 1/ NET GASOLINE TAX EARNED AFTER DEDUCTION OF REFUNDS ALLOWED BY LAW.
2/ MANY STATES PAY COLLECTION COST FROM OTHER STATE FUNDS, AND SUCH ARE NOTED. ADMINISTRATION COST INCLUDES BALANCES ALLOCATED TO RESERVE FUNDS FOR ADMINISTRATIVE PURPOSES, AND AMOUNTS ARE NOTED.
3/ SINCE THIS TABLE COVERS THE CALENDAR YEAR EARNINGS, BUT NOT THE ACTUAL COLLECTIONS DURING THE YEAR, THESE COLUMNS ARE NOT COMPARABLE WITH SIMILAR COLUMNS IN TABLES F-1 AND F-2 WHICH COVER DIFFERENT PERIODS FIXED BY STATE AND LOCAL AGENCIES; ALSO CERTAIN FUNDS ARE ALLOCATED TO BOND PAYMENTS SHOWN IN NEXT COLUMN.
4/ FOR STATE HIGHWAY BONDS, EXCEPT AS NOTED.
5/ SHOWS PERCENT INCREASE OR DECREASE (-) COMPARED TO NET GALLONS REPORTED IN PREVIOUS YEAR.
6/ APPROXIMATELY $16,000 PAID FROM STATE HIGHWAY BUDGET.
7/ RELIEF FUND, ONE-TENTH OF NET MOTOR FUEL TAX AFTER JUNE 30, 1933.
8/ ON FEBRUARY 1 TAX REVERTED TO 4 CENTS AND ON DATE SHOWN CHANGED BACK TO 5 CENTS.
9/ INCLUDES $2,692,325 ASSIGNABLE TO COUNTY BOND PAYMENTS. 10/ TRANSFER TO STATE CHARITY FUND.
11/ TAX RATES OF 2, 4 AND 5 CENTS ALLOWED AT STATE BORDERS.
12/ CONSISTS OF $84,099 TO TRANSPORTATION DIVISION OF STATE BOARD OF EQUALIZATION AND $21,035 TO CONTROLLER REFUND DIVISION.
13/ INCLUDES $14,297 FOR PAYMENT OF CLAIM AND $1,836 FOR EMPLOYEES RETIREMENT FUND.
14/ COST OF APPROXIMATELY $16,000 PAID FROM MOTOR VEHICLE LICENSE RECEIPTS. 15/ PAID FROM STATE GENERAL FUND.
16/ BOND PAYMENTS FROM COMBINED FUND OF GASOLINE TAXES AND MOTOR VEHICLE FEES AND PRO-RATED BETWEEN THEM. 17/ PAYMENTS ON COUNTY ROAD BONDS. 18/ 0 STATE GENERAL REVENUE FUND.
19/ TO AN EQUALIZATION FUND FOR PUBLIC SCHOOLS. 20/ PAYMENTS ON STATE HIGHWAY TREASURY NOTES.
21/ RELIEF FUND PAYMENTS MADE FROM FUND FORMERLY APPORTIONED TO LOCAL ROADS.
22/ PAYMENTS ON COUNTY BONDS FOR STATE ROADS; OBLIGATIONS ASSUMED BY STATE.
23/ LAW EFFECTIVE MAY 1, 1933 ALLOWED 3 PERCENT OF NET GASOLINE TAX RECEIPTS FOR COLLECTION COSTS: $7,900 FROM STATE GENERAL FUND WAS USED DURING FIRST SIX MONTHS.
24/ TO GENERAL FUNDS (STATE, $1,607 AND COUNTIES, $11,128).
25/ $815,694 FOR PUBLIC SCHOOLS, $815,695 FOR PORTS OF NEW ORLEANS AND LAKE CHARLES HARBOR BOARDS OF COMMISSIONERS. 26/ RATE OF 4 CENTS PERMITTED ON 150,717 GALLONS NEAR BORDER.
27/ INCLUDES RECEIPTS FROM 1 CENT TAX ON GASOLINE NOT USED IN MOTOR VEHICLES DUE TO 3 CENT REFUND.
28/ TAX REFUND OF 3 CENTS ALLOWED FOR USE OTHER THAN IN MOTOR VEHICLES.
29/ $75,000 TO CONSERVATION DEPARTMENT; $48,000 FOR APPROACHES TO FERRIES AND $2,320 FOR PROTEST FEES.
30/ TO UNEMPLOYMENT RELIEF FUND, AND OTHER NON-HIGHWAY PURPOSES.
31/ FOR AERONAUTIC FUND $22,677 AND $4,185 TO STATE GENERAL FUND.
32/ INCLUDES INSPECTION FEES OF 2 CENTS PER 50 GALLONS. 33/ PAID BY STATE APPROPRIATION OF $13,000.
34/ INCLUDES $172,909 COST OF GASOLINE INSPECTION AND $15,413 TO STATE GENERAL FUND.
35/ INCLUDES $121,342 FROM SPECIAL TAX IN THREE COUNTIES FOR FINANCING SEA-WALL.
36/ $121,342 FOR SEA-WALL. $11,600 FOR POLICE PATROL TO ENFORCE MOTOR VEHICLE LAW, AND $1,703 UNCOLLECTED CHECKS ON CLOSED BANKS. 37/ $7,500 PAID FROM APPROPRIATION TO STATE TAX COMMISSION
38/ $4,400 PAID FROM MOTOR VEHICLE LICENSE FUNDS.
39/ INCLUDES $4,802 FROM 2 CENT TAX ON GASOLINE USED BY MOTORBOATS.
40/ $5,152,412 TO STATE TREASURY AND $135,000 TO DEPARTMENT OF COMMERCE AND NAVIGATION.
41/ INCLUDES $50,000 PAID TO REFUND RESERVE. 42/ STATE EMERGENCY RELIEF FUND FROM 1 CENT EXTRA TAX.
43/ TAX RATE OF 2 CENTS ALLOWED AT BORDER OF STATE. 44/ INCLUDES $360,319 FOR PAYMENTS ON COUNTY BONDS.
45/ FOR POLICE PATROL AND ADMINISTRATION OF MOTOR VEHICLE LAWS.
46/ CONSISTS OF $2,000,000 FOR STATE EMERGENCY POOR RELIEF FUND AND $2,988,873 FOR PUBLIC SCHOOL FUND.
47/ CONSISTS OF $2,262,605 FOR REDEMPTION OF STATE WARRANTS, $237,127 RESERVE FOR TAXES PAID UNDER PROTEST; $99,921 TO STATE GENERAL REVENUE. 48/ DELINQUENT TAX COLLECTIONS.
49/ INCLUDES PART OF POLICE PATROL EXPENSES; AMOUNT NOT REPORTED.
50/ PAID FROM MOTOR VEHICLE FEES, $15,558. 51/ TO UNEMPLOYMENT RELIEF.
52/ PAID FROM STATE TAX COMMISSION APPROPRIATION. 53/ INCLUDES $2,712,661 FOR PAYMENTS ON COUNTY BONDS.
54/ NEW LAW EFFECTIVE DURING LAST NINE MONTHS ALLOWS ONLY 2 CENT REFUNDS.
55/ THIS DOES NOT CORRESPOND TO GALLONS TAXED AT 4 CENT RATE DUE TO REFUNDS BEING AT 2 CENT RATE.
56/ FOR PAYMENTS ON RURAL CREDIT BONDS. 57/ INCLUDES $183,217 ALLOCATED TO ROADS IN GREAT SMOKY MOUNTAIN PARK.
58/ INCLUDES $1,832,166 PAYMENTS ON COUNTY BONDS AND SAME AMOUNT TO SINKING FUND BONDS.
59/ FOR FREE SCHOOL FUND. 60/ PAYMENTS MADE FROM MOTOR VEHICLE FEES. 61/ ESTIMATE BASED ON PREVIOUS YEAR.
62/ PAYMENTS ON STATE EMERGENCY RELIEF BONDS.
63/ INCLUDES $1,133,646 ALLOTTED IN LIEU OF PERSONAL PROPERTY TAX.

NEWS FOR PETROLEUM REFINERS

Marketers Optimistic After Chicago Meeting

CHICAGO, June 9.—Agreement on several serious problems in the industry are understood to have been furthered at a series of conferences of trade leaders from all sections of the country held at the Blackstone Hotel, Chicago, in the past week.

Most major companies which were parties to the original marketing and purchasing agreements were represented at the meeting, which was under the sponsorship of C. E. Arnott of Socony-Vacuum Corp., head of the Planning and Coordination marketing committee. No official statements or comments on the meetings were forthcoming.

Questions which were discussed included:

1. Concessions to sellers of unbranded or private branded products. Complete unity was lacking but it was understood that consensus at the close of the sessions was more nearly toward some sort of recognition of the principle of a differential for such sellers than at any time in the history of this troubled problem. Some majors are still not agreeable to an out-and-out price differential.

2. The code's provision of sales below cost. This is a subject which is tied closely up to lower prices for unbranded sellers. There also was some consideration of whether the new broad policy of the NRA in abandoning fixed prices in various industries might have some reverberations in the oil code. General belief was that this would have little effect on the petroleum code, or even on the marketing agreement, which is now held up pending final decision by the department of justice on its provisions.

3. Pool buying of gasoline. Plans were laid for getting into action promptly with a large volume of buying power for the open market, possibly involving several thousand cars of gasoline, mostly third grade.

General expectation is that the marketing agreement will be placed in operation soon, as the belief is common that it will receive approval of the department of justice. It already has received approval of the petroleum administrator.

JULY GASOLINE ALLOCATION

WASHINGTON, D. C., June 11.—The gasoline production allowable for July has been established at 37,200,000 bbls., an increase over June of 2,600,000 bbls.

THREE CITED FOR PREMIUMS

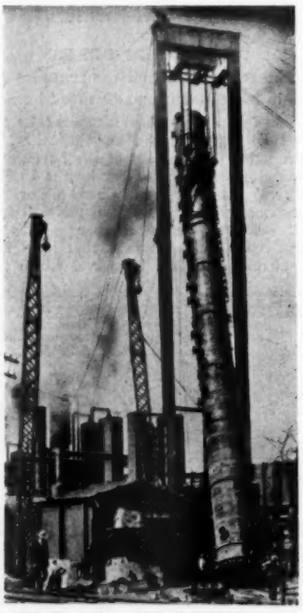
MUSKEGON, Mich., June 11.—Through William S. Sayres, special master named by Secretary Ickes for the petroleum division of the NRA, the government has brought suit against three Detroit, Mich., distributing firms charging violation of the code of fair competition for the petroleum industry.

The three firms named are the Otto Super-Service Stations, the Johnson Oil Co. and Liberty Super Service Co., alleged during the past year to have offered premiums with the purchase of gasoline.

Special Master Sayres made the following statement in reference to the case: "I am convinced by the evidence and I find that the practice of giving premiums in connection with the sale of petroleum products as carried on by the defendants in violation of Rule 17 of Article V of the Petroleum Code, necessarily and substantially affects interstate commerce in such products by causing competitive price wars which result in serious disturbance in the proper equilibrium between interstate commerce and intrastate commerce in petroleum products, in diversion of currents of such interstate commerce normally prevailing between the producing, refining and marketing branches of the industry, and in disastrous disruption of the price structure necessary to properly maintain either intrastate, or interstate commerce in such industry."

United Adds Fractionating Tower of Record Height

One of the tallest fractionating towers ever built was recently completed for the United Refining Co., Warren, Pa.



All electric welded fractionating tower, 110 feet in height, being erected at the United Refining Co. plant, Warren, Pa.

This tower is 6 feet 9 inches in diameter and 110 feet high. It was constructed entirely by arc welding and shipped in one piece, weighing 80 tons. The tower was Lincoln welded by the Struthers-Wells Co.

D. M. Morrison Named Head of Canadian Plant

MONTREAL, June 11.—D. M. Morrison has been appointed manager of the Shell plant at Montreal East, according to a statement made by P. M. Fowlie, president of the Shell Oil Co. of Canada, Ltd. He formerly held the post of assistant manager of the plant, which is one of the most modern in this continent.

Born in Nova Scotia, he moved to British Columbia at an early age and received his education there, graduating in engineering from the University of British Columbia. He subsequently pursued post-graduate studies at McGill University and was awarded the degrees of Ph.D. in 1924. After a further year of engineering research work at McGill he went to Cambridge University, where he continued his research studies.

He joined the Shell organization in London and later served on the staff of the Wood River refinery and subsequently was appointed chief technician of the Arkansas City plant. He returned to Montreal in January of last year.

FIRE MARSHALS RE-ELECTED

WARREN, Pa., June 9.—All officers of the Fire and Safety Marshals, National Petroleum Association, were re-elected at the ninth annual meeting here. The officers are: J. H. Herbert, Standard Oil Co. of Ohio, president; S. M. Wolberg. Kendall Refining Co., vice president, and D. I. Harvey, the Pennzoil Co., secretary-treasurer. More than 150 marshals and safety directors are attending the two-day sessions which close today.

Among the speakers were the following: Roy S. Bonsib, chief safety inspector, Standard Oil Co. of New Jersey; Capt. A. A. Nicholson, the Texas Co.; J. J. Forbes, U. S. Bureau of Mines; Willis Crane, associate counsel of the National Petroleum Assn.; D. V. Stroop, American Petroleum Institute; Douglas G. Kropf, chief of the Warren fire department; H. A. Logan, president of United Refining Co.

Kendall Refining Co. team No. 1 retained the first aid championship in the contest held yesterday. Kendall's team No. 2 placed second, and the Pennzoil Co. team took third.

ALL GASOLINE TAXED NOW

Arkansas has repealed the exemption formerly granted by the state gasoline tax law on motor fuel used in agricultural machines and manufacturing plants. Wholesale evasion of the gasoline tax by beneficiaries of the exemption and the consequent loss of revenue prompted this change.

Taxes Indicate 10 Per Cent Greater Gasoline Demand

Domestic gasoline consumption so far this year is approximately 10 per cent more than a year ago and in March was 12.3 per cent more than the same month in 1933, according to tax reports made to the individual states and correlated by the A.P.I.

While it is felt that the figures herewith are fairly comparable, it must be borne in mind that more or less widespread tax evasion and changes in the basic laws under which the figures were collected over the period compared may have disturbed the comparability of the figures. All demand calculations used by the American Petroleum Institute as final are based upon Bureau of Mines' monthly statistics, which are regarded as being more truly indicative.

	Mar., 1934 (gals.)	Mar., 1933 (gals.)
Alabama	12,442,000	10,121,000
Arizona	6,064,000	5,219,000
Arkansas	10,407,000	7,303,000
California	136,314,000	109,560,000
Colorado	11,374,000	11,353,000
Connecticut	16,964,000	16,825,000
Delaware	2,695,000	2,422,000
Dist. of Columbia	7,679,000	8,472,000
Florida	24,278,000	19,095,000
Georgia	19,321,000	17,142,000
Idaho	4,769,000	2,522,000
Illinois	72,880,000	68,339,000
Indiana	34,617,000	32,757,000
Iowa	30,051,000	25,421,000
Kansas	27,877,000	23,426,000
Kentucky	13,078,000	11,415,000
Louisiana	13,418,000	11,515,000
Maine	5,623,000	5,191,000
Maryland	14,110,000	13,574,000
Massachusetts	39,181,000	37,810,000
Michigan	56,865,000	52,868,000
Minnesota	31,425,000	27,012,000
Mississippi	10,054,000	7,293,000
Missouri	36,596,000	34,634,000
Montana	5,824,000	4,614,000
Nebraska	16,255,000	13,182,000
Nevada	1,528,000	1,326,000
New Hampshire	3,889,000	3,511,000
New Jersey	50,651,000	52,467,000
New Mexico	3,755,000	3,497,000
New York	107,742,000	105,798,000
North Carolina	20,849,000	16,778,000
North Dakota	8,735,000	6,649,000
Ohio	69,816,000	62,110,000
Oklahoma	23,392,000	19,974,000
Oregon	13,152,000	14,208,000
Pennsylvania	82,370,000	74,930,000
Rhode Island	7,399,000	8,058,000
South Carolina	10,680,000	9,340,000
South Dakota	9,425,000	8,109,000
Tennessee	16,114,000	13,468,000
Texas	69,368,000	57,298,000
Utah	4,509,000	3,774,000
Vermont	2,342,000	2,144,000
Virginia	18,614,000	17,962,000
Washington	24,461,000	20,288,000
West Virginia	9,806,000	8,231,000
Wisconsin	30,842,000	24,935,000
Wyoming	3,633,000	2,138,000
Total	1,253,433,000	1,116,078,000
Daily average	40,433,000	36,003,000
Change from previous year:		
Total change	+137,355,000	.....
Percentage change in daily ave.	+12.30%	.....

CORPUS CHRISTI REFINERY

The contract for the 1,000-bbl. refinery to be built by G. L. Rowsey at Corpus Christi, Tex., was taken by the Lummus Co., on a turn-key basis, the plant to include a 1,000-bbl. cracking unit.

W. G. WHITEMAN JOINS M.I.T.

Walter G. Whiteman, who has been associate director of research for the Standard Oil Co. (Indiana), has been appointed head of the department of chemical engineering at Massachusetts Institute of Technology. He succeeds the late Prof. William P. Ryan, who died June, 1933. Doctor Whiteman, who is widely known in refinery technical circules, joined the technical staff of the Indiana company in 1926.

Oklahoma University Engineers Ready for Field Trip

Refineries, natural gasoline plants and oil producing properties throughout the Mid-Continent and Gulf Coast areas will be visited this summer by engineers enrolled in the field course offered by the School of Petroleum Engineering at the University of Oklahoma. Reading from left to right are I. F. Bingham, W. F. Cloud and Dr. R. L. Huntington, instructors in the university who have been chosen by W. H. Carson, director, to supervise these field studies

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NATURAL GASOLINE MANUFACTURE

Manufacturers Must File Tax Bond Before July 1

Construing the term "motor fuel manufacturer" to include the blender of natural gasoline with refinery gasoline at bulk plants as well as actual manufacturers of natural gasoline, and refinery gasoline a final effort is being made by the Treasury Department to have such manufacturers file bonds of $2,000 each by July 1 as provided in Section 603 of the Revenue Act of 1934. The ruling, it will be remembered also included importers of gasoline and manufacturers of lubricating oils. Attention is drawn to a portion of a subsection of the article:

"Every person who fails to register or give bond as required by this subsection, or who in connection with any purchase of gasoline or lubricating oil falsely represents himself to be registered and bonded as provided by this subsection, or who willfully makes any false statement in an application for registration under this subsection, shall upon conviction thereof be fined not more than $5,000 or imprisoned not more than five years, or both, together with the costs of prosecution. If the commissioner finds that any manufacturer or producer has at any time evaded any Federal tax on gasoline or lubricating oil, he may revoke the registration of such manufacturer or producer, and no sale to, or for resale to, such manufacturer or producer thereafter shall be tax-free under Section 601(c)(1), this section, or Section 620, as amended, but such manufacturer or producer shall not be relieved of the requirement of giving bond under this subsection.

"Pursuant to the above provisions, every importer or producer of gasoline and every manufacturer or producer of lubricating oil shall before June 9, 1934 (or in the case of a person commencing business after such date, before incurring any liability for tax on such products), file bond on Form 928 with the collector of the district in which is located his principal place of business (or if he has no principal place of business in the United States, with the collector at Baltimore, Md.), such bond to be approved by the collector. Bonds filed before July 1, 1934, will be accepted as timely filed.

"Such bonds shall be in a sum equivalent to the approximate amount of tax which would be incurred during a three-month period at the rates of tax now in effect, but in no case shall the bond be for less than $2,000.

"Where the amount of the bond under such circumstances will exceed $30,000, the collector may accept a bond for not less than $30,000. In such cases there should be submitted to the collector for transmittal to the commissioner all facts pertaining to the ownership and value of the property and equipment which will be of assistance to the commissioner in determining whether a larger bond should be required from the applicant. In transmitting this data the collector should submit his recommendation as to the sufficiency of the bond.

"Bonds must be in multiples of $100. Where the sum equivalent to the approximate amount of tax which would be incurred during a three-month period is an odd amount, the amount of the bond shall be increased to the next multiple of $100. For example, if the approximate amount of tax likely to be incurred during a three-month period amounts to $6,666.66, the amount of the bond shall be $6,700.

Panhandle Natural Gasoline Production Forty-Three Per Cent Over Year Ago

Natural gasoline production in the Panhandle Field of Texas over the first four months of 1934 was 43 per cent more than during the same period last year, according to the latest report of the Bureau of Mines. In the first quarter of 1934 the Panhandle accounts for 77,500,000 gallons whereas a year ago the same area accounted for 54,200,000 gallons. This increase accounts for a substantial portion of the total increase for the United States which production in 1934 amounted to 494,100,000 gallons and in 1933 was 456,300,000 gallons.

The East Texas Field continues to become increasingly important as a source of natural gasoline. In April the East Texas production reached 2,600,000 gallons, a new monthly record, exceeding March by 100,000 gallons. Production in the field will very likely reach a new high in May when figures are completed because of the effect of new plants and an increasing volume of gas processed.

Stocks of natural gasoline at manufacturing plants rose sharply during April, the increase being accounted for in part by the increased production for the month and also because of the curtailing of purchases on the part of refiners.

On the first of the month stocks on hand at plants totaled 42,918,000 gallons and at the close of the month stood at 53,857,000 gallons. The increased stocks place the industry in a weaker position in its effort to rebuild prices to a normal level but this increase may be accounted for in part as being seasonal. If this rate of increasing stocks is continued throughout the summer months, into August, which usually marks the seasonal pickup in sales, the fall market will be in a hazardous position. The success the industry has in convincing the oil administration that production must be curtailed in order to maintain profitable prices will be a deciding factor in the final answer to the question.

Although Texas accounts for the great bulk of the total increase in natural gasoline production so far this year, Oklahoma is also a contributing factor. Oklahoma has stepped up its production about 3,000,000 gallons monthly, the Oklahoma City Field being the principal source. California remains slightly under last year's production figures.

PRODUCTION AND DISTRIBUTION OF NATURAL GASOLINE
(Thousands of barrels of 42 gallons)

	April, 1934 Total	April, 1934 Daily av.	March, 1934 Total	March, 1934 Daily av.	Jan.-Apr., 1934	Jan.-Apr., 1933
Total production	2,926	98	3,019	97	11,764	10,864
Blended at refineries	1,941	65	2,017	65	7,863	7,275
Blended at plants east of Calif.	26	1	23	1	91	131
Run through pipe lines in Calif.	97	3	119	4	472	337
Jobbers, exports, etc.	257	9	328	11	1,289	1,756
Increase in all stocks	343	11	140	4	579	384
Losses	262	9	392	13	1,470	981
Total	2,926	98	3,019	97	11,764	10,864

PRODUCTION OF MOTOR FUEL
(Thousands of barrels of 42 gallons)

	April, 1934 Total	April, 1934 Daily av.	March, 1934 Total	March, 1934 Daily av.	Jan.-Apr., 1934	Jan.-Apr., 1933
Refinery gasoline:						
Straightrun	17,496	583	16,749	540	66,568	60,730
Cracked	14,563	485	13,820	446	55,833	53,241
Natural gasoline:						
Production	2,926	98	3,019	97	11,764	10,864
Deduct losses	262	9	392	12	1,470	981
Benzol	152	5	159	5	573	360
Total motor fuel	34,875	1,162	33,355	1,076	133,268	124,214

PRODUCTION AND STOCKS BY FIELDS
(Thousands of gallons)

	Natural gasoline: Production Apr., 1934	Mar., 1934	Jan.-Apr., 1934	Jan.-Apr., 1933	Stocks end of month: Apr., 1934	Mar., 1934	Blended motor fuel April 1934: Natural gasoline used	Naphtha or other oils used	Stocks end of month
Appalachian	4,900	6,000	25,000	24,000	7,138	6,103	297	101	188
Ill. and Ky.	600	800	3,000	3,000	607	627	.....	.....	.....
Oklahoma	30,500	31,500	122,300	111,100	20,750	19,486	20	21	27
Oklahoma City	9,500	9,300	36,400	25,300	5,812	4,877	.....	.....	.....
Osage County	3,400	3,800	14,400	13,300	4,332	3,999	.....	.....	5
Seminole	7,200	7,600	29,300	30,800	3,904	3,906	2	.....	.....
Rest of State	10,400	10,800	42,200	41,700	6,702	6,704	18	21	22
Kansas	2,200	2,200	9,100	8,300	1,186	819	48	13	38
Texas	35,800	36,300	140,300	112,100	18,378	10,215	340	692	94
East Texas	2,600	2,500	9,900	4,800	303	279	278	651	49
North Texas	1,800	1,900	7,300	7,000	706	729	.....	.....	.....
Panhandle	20,000	20,500	77,500	54,200	13,055	5,857	38	41	4
West Central	7,400	7,500	29,500	26,800	3,009	2,318	24	.....	41
Rest of State	4,000	3,900	16,100	19,300	1,305	1,002	.....	.....	.....
Louisiana	3,500	3,500	14,000	13,400	669	907	63	.....	8
Arkansas	1,100	1,100	4,300	5,200	132	186	303	453	61
Rocky Mountain	4,900	4,800	19,000	18,500	1,160	1,186	8	13	6
California	39,400	40,600	159,100	160,700	3,558	3,389	.....	.....	.....
Huntington Beach	3,000	3,100	11,700	5,600	.....	.....	.....	.....	.....
Kettleman Hills	11,100	11,500	47,800	45,400	.....	.....	.....	.....	.....
Long Beach	6,400	6,400	24,000	27,700	.....	.....	.....	.....	.....
Santa Fe Springs	5,100	5,200	20,700	27,100	.....	.....	.....	.....	.....
Ventura Avenue	3,400	4,000	14,600	13,600	.....	.....	.....	.....	.....
Rest of State	10,400	10,300	40,300	41,300	.....	.....	.....	.....	.....
Total	122,900	126,800	494,100	456,300	53,587	42,918	1,079	1,293	425
Daily average	4,100	4,090	4,120	3,800	.....	.....	36	43	.....
Total (thousands of barrels)	2,926	3,019	11,764	10,864	1,276	1,022	26	31	10
Daily average	98	97	98	91	.....	.....	1	1	.....

Construction of Carbon Dioxide Plant to Start

LOS ANGELES, Calif., June 11.—The carbon dioxide plant which the Salton Sea Chemical Co. has contemplated erecting at the eastern end of Salton Sea in Imperial Valley is expected to get under way in the immediate future. Present plans call for the installation of a 10-ton plant with adequate storage facilities and necessary equipment. An experimental plant on a small scale has been in operation for several months and has disposed of small quantities of dry ice in the immediate vicinity. Laboratory tests indicate that the gas is approximately 99.9 per cent pure carbon dioxide. Gas wells in this area are completed at a relatively shallow depth, approximately 600 feet, and it is quite likely that several additional wells will be drilled upon completion of the projected plant. The Southern Pacific owns considerable acreage in this area but the company has been waiting for about a year pending developments. For some time previously the Southern Pacific leased out some of this acreage but has not done so for the past year. The importance of such a development to the Southern Pacific Railroad is quite obvious as the company moves considerable produce including melons and vegetables out of the Imperial Valley. Due to the high temperatures encountered in traversing Imperial Valley and across Arizona, refrigeration is an important factor in the preservation of foodstuffs.

TURNER VALLEY NAPHTHA

CALGARY, Alberta, June 9.—In connection with the recent cut in prices of crude naphtha from the Turner Valley Field, the statement has been made by J. H. McLeod, western production manager of Imperial Oil, Ltd., that the company has 400,000 bbls. of Turner Valley products in storage at the Imperial Oil Refineries plant at East Calgary.

Accumulation of this large storage has forced the company to seek a wider market for Turner Valley products; and owing to the higher freight charges, it has been necessary to reduce the price paid for naphtha.

Reports that Imperial Oil, Ltd., was planning to market absorption plant gasoline in Calgary at 12½ cents a gallon have been denied by an official of the company's marketing department. The company has opened facilities at the East Calgary refinery for marketing of naphtha at 10 cents and washed naphtha at 12½ cents a gallon to farmers. This is, however, purely a service to farmers, and the product is not for general sale. It is pointed out, that neither separator nor absorption plant naphtha is suitable for motor car use without additional treatment; the product as it comes from the plant being too volatile.

NEW ABSORPTION PLANT

CALGARY, Alberta, June 9.—Gas & Oil Products, Ltd., has commenced foundation work for its new gasoline absorption plant at the Mercury camp in Section 4-19-2w5, South Turner Valley. Thirteen carloads of plant equipment have been shipped from Texas.

BUSES TO USE BUTANE

Another big step in extending the use of butane is seen in the report that the Los Angeles Railway Co. proposes to equip eight buses to consume this fuel in place of gasoline. Butane is already being used by an increasing number of motor trucks and many advantages are claimed for it.

East Texas Cheap Gasoline in Chicago Affects Market; Consumption Is Up

By SPECIAL CORRESPONDENT

CHICAGO, June 11. — Numerous uncertainties continued to make themselves felt in the tank car gasoline market over the week-end, chief of which was the question of the resumption of large-scale buying on the part of large refiners. Purchasing power undoubtedly was in the offing, but the trade was divided in sentiment as to when it might make itself felt.

Heavy offerings of third grade material out of East Texas continued to exert an urgent influence. Extremely low prices were reported on some material, which had been shipped without definite destination. Most jobbers were able to buy material at quite low prices and some sellers were asking for bids. Jobber buying was still of a disappointing nature, although jobbers were still taking good amounts of contract gasoline.

Jobber revolt against leadership has quieted down. One reason seems to be that Administrator Ickes recently announced more stringent code enforcement and prompter prosecutions.

Third-Grade Gallonage

The recurrence of weakness in tank car gasoline has been mostly in third-grade material, although this has sympathetically affected other grades. In some regions, third-grade gasoline is the one principally involved in price wars and it would not be surprising to learn that total gallonage of this type product was running somewhat larger than recently in relation to total gallonage, in view of the lower prices. Considerable blending seems to be going on in the jobbing trade.

Summer gasoline merchandising and promotion plans now are well under way on the part of representative sellers. Some of these in this region are tying up with the World's Fair, which presumably is stimulating gasoline consumption to some extent.

Kerosene

Kerosene demand and consumption has been injured by the drouth, and as a result the tank car market is sagging a little more. It seems possible that use of kerosene in the late planting of rescue crops may help the product a little marketwise. Much of the current offering of kerosene is in the way of East Texas material, and thereabouts.

Heating Oils

Distributors of heating oils are beginning to display interest in filling their storage for the autumn-winter season. Some sellers continue to offer material at publication prices, and few refiners wish to sell at a flat figure. Relative to flat contracts made over a period, it is interesting to note that most of them in the oil industry now carry a hedge clause based on possibilities of further inflation or other unusual conditions which would have a bearing on prices.

Fuels, Gas Oils

Heavy fuels and gas oils are a bit easier on some grades, without any general weakness appearing. Buying is fair, offerings a little larger.

Coke

Petroleum coke is seasonally inactive and dull, with demand not brisk and supplies ample. No special connection is seen with the new order eliminating fixed prices in NRA codes. Coal authorities believe the order will have little effect on prices of coal and related items.

Naphthas

Naphthas are quiet, without any material change in the demand or supply factors.

Waxes

Waxes are still in good call at present relatively high prices.

Lubricants

Lubricating oil business is rather satisfactory. Jobber and compounder orders are reaching good totals. Retail motor oil sales are reported reaching good totals. Prices seem fairly well stabilized for the present.

Crude Oil Prices

(Continued from Page 25)

Effective September 29 in Salt Flat by Shell Petroleum Corp.

Rocky Mountain States

Iles, light (Sept. 29, 1933)	$.96
Iles, heavy (Sept. 29, 1933)	.90
Florence, Colo. (June 17, 1933)	.30
Fort Collins and Wellington, Colo. (June 17)	(See Salt Creek prices)
Big Muddy (Sept. 29, 1933)	1.01
Frannie, light (May 1, 1934)	.70
Frannie, heavy (Sept. 29, 1933)	.62
Salt Creek and LaBarge (Sept. 9, 1933)	
See Stanolind Mid-Continent price schedule	
Grass Creek, light (Sept. 29, 1933)	1.18
Grass Creek, heavy (Dec. 15, 1932)	.45
Elk Basin (Sept. 29, 1933)	1.18
Rock Creek (Sept. 29, 1933)	1.02
Dutton Creek (July 8, 1933)	See Mid-Continent gravity prices
Lance Creek (Dec. 16, 1932)	.92
Poison Spider (Mar. 5, 1931)	.70
Hudson (June 2, 1931)	.65
Lander (Mar. 5, 1931)	.40
Rex Lake (Feb. 22, 1930)	1.10
Osage	1.08
Lost Soldier (Sept. 30, 1933)	.88
Hamilton Dome (Dec. 16, 1932)	.25
Torchlight (Sept. 29, 1933)	1.18
Greybull (Sept. 29, 1933)	1.18
Pondera	1.15
Sunburst (Sept. 29, 1933)	1.35
Cat Creek, Montana	1.07
Hogback (Sept. 29, 1933)	1.11
Lea County, N. Mex. (Sept. 29, 1933)	.75
Maljamar (Sept. 29, 1933)	.70
Artesia-Jackson (Dec. 1, 1933)*	.75

Note—Salt Creek, Torchlight, Elk Basin, Grass Creek, Frannie, Greybull, Hogback and Iles by Stanolind Oil & Gas Co. Elk Basin, Grass Creek light, Big Muddy, Rock Creek and Sunburst by Ohio Oil Co. Lost Soldier posted by Producers & Refiners Corp. Artesia, Jackson and Maljamar posted by Continental Oil Co. Lea County, effective September 29, 1933, by Humble Oil & Refining Co. and other buyers; Fort Collins, Wellington, Orchard, Florence, Big Muddy, Cat Creek, Rattlesnake and Table Mesa by Continental Oil Co. Osage posted by Arro.

*Continental Oil Co.

North Louisiana and Arkansas

Smackover, Ark. (all grades)	$.70
Tullos-Urania, La. (Jan. 13, 1934)	.87
Nevada, Ark. (Sept. 29, 1933)	.60
East El Dorado (Sept. 29, 1933)	.70
Converse, La. (Mar. 17, 1934)	1.03
Elm Grove, La. (Sept. 29, 1933)	.75
Holly, La. (Mar. 17, 1934)	1.03
Pleasant Hill, La. (Mar. 17, 1934)	1.03
Zwolle, La. (Mar. 17, 1934)	1.03
Champagnolle, Ark. (Mar. 17, 1934)	.81
Lisbon, Ark. (Mar. 17, 1934)	1.03
Stephens, Ark. (Sept. 29, 1933)	.70
Urbana, Ark. (Mar. 17, 1934)	.68
Other fields	(See gravity table)

Note—Smackover: Effective September 29, 1933, Texas Co., Magnolia Petroleum Co., Standard of Louisiana, Louisiana Oil Refining Corp., Gulf Refining Co. and Phillips Petroleum Co. East El Dorado posted by Magnolia Petroleum Co. and Gulf Refining Co., Nevada by Standard Oil Co. of Louisiana. Urania posted by H. L. Hunt, Inc., and Louisiana Oil Refining Co. Converse, Holly, Zwolle and Urbana by Standard Oil Co. of Louisiana; Elm Grove by Simmons Oil & Refining Co.; Pleasant Hill by Standard Oil Co. and Magnolia Petroleum Co.; Champagnolle by Standard Oil Co. and Lion Oil & Refining Co.

Eastern States

TIDE WATER PIPE CO.
(Effective May 1, 1934)

Bradford, Pa.	$2.55
Allegany, N. Y.	2.55

SOUTH PENN OIL CO.
(Effective May 1, 1934)

Pennsylvania Grade Oil in National Transit Lines (Bradford Field)	2.55
Pennsylvania Grade Oil in Southwest Pennsylvania Lines	2.33
Pennsylvania Grade Oil in Eureka Pipe Line lines	2.17
Pennsylvania Grade Oil in Buckeye Pipe Line lines	2.07
Corning Grade Oil in Buckeye Pipe Line Co.'s lines (Oct. 2, 1933)	1.53

PENNZOIL CO.
(Effective May 1, 1934)

Pennsylvania Grade Oil in National Transit Lines:	
Group A (Includes Cochran, Franklin, Hamilton and Doolittle districts.)	$2.47
Group B (Includes Titusville district.)	2.46
Group C (Includes Turkey and Tidioute districts.)	2.46
Group D (Includes Bear Creek and Porkey districts.)	2.44
Group E (Includes Eldeneau, Bull Creek, Rough Run, Carbon, Dipner, Bredin, McJunkin, Jameson Kennerdell, Emlenton, Tiona, Lacy and Kinzua districts.)	2.42

Price depends on length of pipe line haul to plant at Oil City.

PURE OIL CO.
(Effective May 1, 1934)

Cabin Creek, W. Va.	$2.17
Bradford Hollow, W. Va.	2.17
Kelly Creek, W. Va.	2.17

Middle Western States

OHIO OIL CO.
(Effective September 29, 1933)

Lima	$1.80
Illinois (Jan. 5, 1934)	1.18
Princeton, Ind. (Jan. 5, 1934)	1.18
Plymouth	Shut in
Western Kentucky	1.18
Midland, Mich. (Sept. 30, 1933)*	1.93
Oceana, Mich. (Oct. 5, 1933)	.90
Somerset, Ky. (Sept. 30, 1933)	1.33
Hart County, Ky. (Oct. 1, 1933)	1.18

*Posted by Pure Oil Co. Producers Pipe Line Co. pays 5 cents per barrel over Pure Oil Co.'s posted price. Somerset, Ky., crude purchased by Ashland Refining Co., Ashland, Ky., and posted price includes premium. Hart County, Kentucky, crude purchased by Stoll Refining Co. Oceana posted by Old Dutch Refining Co. and Naph-Sol Refining Co.

Canada

Ontario (September 9, 1933):	
Petrolia*	$2.10
Oil Springs	2.17
Turner Valley (May 21, 1934):†	
Clear naphtha	$2.55
Discolored naphtha	2.31
Crude oil, 50 gravity	2.19
Crude oil, 45 to 49.9	2.07
Crude oil, 40 to 44.9	1.86

*Imperial Oil, Ltd. †Imperial Oil, Ltd., and Regal Oil & Refining Co.

Mexico

Panuco*	$1.14

*F.o.b. ship, based on March transactions and exclusive of production and export taxes and bar dues.

California Crude Oil Prices

STANDARD OIL CO OF CALIFORNIA
(Effective September 6, 1933)

For current purchases of crude oil at the well (unless otherwise specified). (All gravities above those quoted take highest price offered in that field.)

Gravity—	Long Beach	Seal Beach, Alamitos Heights	Huntington Beach	Inglewood	Playa del Rey	Olinda, Brea Canyon	Athens-Rosecrans	Torrance	Richfield	Whittier, La Habra	Montebello	Santa Fe Springs	La Habra-Coyote	Midway-Sunset, Elk Hills, Buena Vista Hills	Lost Hills	Coalinga	Coyote
offered in that field.)																	
14-14.9	$.65	$.65	$ 65	$.65	$.65	$.65	....	$.65	$.65	$.65	$.65	....	$.65	$.57	$.57	$.57	$.65
15-15.9	.66	65	.69	.69	.66	.69	....	.66	.66	.66	.65	....	.65	....	....	....	.66
16-16.9	.66	.65	72	.73	.69	.73	....	.69	.67	.68	.65	....	.65	....	....	....	.66
17-17.9	.69	.65	75	.76	.73	.76	....	.72	.70	71	.65	..	.68	....	....	....	68
18-18.9	72	.65	78	.80	.76	.79	....	.75	.74	.74	.65	....	.71	.61	.61	.59	.71
19-19.9	.76	.65	81	.83	.80	.82	....	.78	.78	.78	66	....	.74	.64	65	.62	.74
20-20.9	.78	.68	83	.87	.83	.85	....	81	82	.81	.66	....	.78	.67	.69	.65	.78
21.21-9	.81	.72	.86	.90	.87	.88	....	.83	85	.84	.69	$ 72	.81	.70	.72	.68	.81
22-22.9	.84	.76	89	.94	.90	92	....	85	.89	.87	.72	.76	.84	.73	.76	.72	.84
23-23.9	.88	.81	.92	.97	.94	.95	$.83	89	.93	.90	76	.79	.87	.77	.79	.75	.87
24-24.9	.91	.85	.95	1.01	.97	98	.86	.92	.97	.93	.80	.82	.90	.81	.82	.78	.90
25-25.9	.94	.89	.98	....	1.00	1.01	.90	.95	1.00	....	.85	.87	.93	.85	.85	81	.93
26-26.9	.97	.93	1.01	....	1 04	1.04	.94	.98	1.04	....	89	.90	.96	.89	.88	....	.96
27-27.9	1.00	.98	1 04	....	....	1 07	.97	....	1.08	....	....	.94	.99	.93	.91	....	99
28-28.9	1.03	1.02	1.07	....	....	1.10	1.01	....	1.11	....	....	.98	1.02	.97	.94	..	1.02
29-29.9	1 06	1.05	1.09	....	....	....	1.04	....	1.15	....	....	1.01	1.05	1.01	.97	..	1.06
30-30.9	1.09	1.10	1 12	....	....	....	1.08	....	....	....	....	1.05	1.09	1.05	1 00	....	1.09
31-31.9	....	....	....	....	....	....	1 12	....	....	....	....	1.08	1.12	1.09	....	....	1.12
32-32.9	....	....	....	....	....	....	1 15	....	....	....	....	1.12	1.15	1.13	....	....	1.15
33-33.9	....	....	....	....	....	....	....	....	....	....	....	1.16	1.18	1.17	....	....	1 18
34-34.9	....	....	....	....	....	....	....	....	....	....	....	1.19	1.21	....	....	....	1 21
35-35.9	....	....	....	....	....	....	....	....	....	....	....	1.22	....	....	....	....	....
36-36.9	....	....	....	....	....	....	....	....	....	....	....	1.26	....	....	....	....	....
37-37.9	....	....	....	....	....	....	....	....	....	....	....	1 30	....	....	....	....	....
38-38.9	....	....	....	....	....	....	....	....	....	....	....	1.34	....	....	....	....	....

Additional Standard Oil Quotations

Elwood Terrace—F.o.b. ship, 33 degrees, $1.03; 34 degrees, $1.06; 35-35.9, $1.09; 36-36.9, $1.12; 37 degrees and over 1.15.

Newhall—14 degrees and over, 57 cents.

McKittrick and Kern River—14 degrees and over, 57 cents.

Wheeler Ridge—14 to 17.9 degrees, 57 cents; 18-18.9, 58 cents; 19-19.9, 61 cents; 20-20.9, 64 cents; 21-21.9, 67 cents; 22-22.9, 70 cents; 23-23.9, 73 cents; 24-24.9, 76 cents; 25 degrees and over, 79 cents.

Kettleman Hills—33-33.9 degrees, 93 cents; 34-34.9, 96 cents; 35-35.9, 99 cents; 36-36.9, $1.02; 37-37.9, $1.05; 38-38.9, $1.08; 39 degrees and over, $1.11.

The Texas Co. posted in Shiells Canyon, South Mountain and Santa Paula as follows: 14 to 17.9, 57 cents; 3 cents added for each degree up to and including 26-26.9 degrees at 84 cents; then 4 cents added for each degree up to and including 30 degrees and over at $1. Company posts Standard Oil Co.'s Montebello prices in Montebello and North Whittier, and posts Standard Oil Co. prices in Signal Hill, Alamitos Heights, Huntington Beach, Torrance, Richfield and Santa Fe Springs, all effective September 6.

General Petroleum Co. posts Standard Oil Co. prices in Athens, Rosecrans and Signal Hill; Alamitos Heights up to 26-26.9; Santa Fe Springs up to 25-25.9; Richfield up to 25-25.9; Brea Canyon and Olinda up to 25-25.9, and Torrance up to 25-25.9.

Union Oil Co., effective September 6, posts same price as Standard Oil Co. in all fields in which both purchase, excepting that in Athens-Rosecrans, Union Oil Co. posts 21-21.9, 72 cents, and 33-33.9, $1.18; 34-34.9, $1.21, and 35-35.9, $1.24.

Associated Oil Co., effective September 6, posted same prices for the same grades as Standard Oil Co. of California, excepting that in some fields its gravity scale stops as follows: Huntington Beach, 26 degrees and over; Seal Beach and Alamitos Heights, 26 degrees and over; Coyote Hills, 23 degrees and over; Richfield, 25 degrees and over; Torrance, 25 degrees and over; Inglewood, 24 degrees and over; Santa Fe Springs, 25 degrees and over; Midway-Sunset, Elk Hills, Buena Vista Hills, 26 degrees and over. Also Associated pays 53 cents for oil of 11 to 13.9 gravity in McKittrick, Kern Front, Kern River, Midway-Sunset, Elk Hills, Buena Vista Hills and Coalinga.

Late Fields

OKLAHOMA

Jarvis & Holm and Winona Oil Co.'s No. 1 Meyers, SE SW NE Section 31-7-8, southwest of Holdenville, and in Seminole County, Oklahoma, flowed 577 bbls. in 1 hour and 10 minutes, with gas at the rate of 10,000,000 feet per day. It is producing from Wilcox sand at 4,193-4,214 feet.

Fleetborn and others' No. 1 Bowley, NE NE SW Section 31-8-8, Seminole County, flowed 1,892 bbls. in 48 hours and 1,699 bbls. the previous 48 hours, or 3,591 bbls. from Friday at 7 a. m. to Monday at 7 a. m.

Continental Oil Co.'s No. 1 Bennett, SE SE NW Section 19-20-1w, a wildcat in Noble County, cored a saturated Wilcox sand at 5,105-10 feet, recovering a foot of oil sand.

The Texas Co.'s No. 1 Voss, SW NE SE Section 28-22-2w, Noble County, had an oil showing in Viola lime at 4,742-55 feet. Casing was cemented and the crew was preparing to drill the plug.

KANSAS

Keith and others' No. 1 Grove, C SE SE NW Section 29-19-9w, Rice County, Kansas, had Kansas City lime at 2,932 feet, an oil and gas showing at 2,953 feet, and an increase in oil at 2,975-85 feet. The hole filled 1,000 feet with fluid in 48 hours. Six and five-eighth inch casing was set at 2,985 feet, with bottom joint perforated, and a test will be made.

Atlantic Oil Producing Co.'s test in C E half NW NE Section 22-22-6w, Reno County, found salt water at 4,063-65 feet and will be abandoned.

Tom Palmer and others' No. 1, C SE SE SW Section 19-18-2w, McPherson County, found Viola lime at 3,190-99 feet. It was acidized, and the well pumped 279 bbls. of oil in 24 hours. The hole was deepened to 3,213 feet with no increase in oil.

Phillips Petroleum Co.'s No. 1 Dopita, C SW SW Section 31-8-17w, was acidized in Oswalt lime at 3,312-16 feet. It produced 20 bbls. of net oil while being swabbed to the bottom. Later it swabbed 5 bbls. of oil and a quarter of a barrel of water in 40 minutes. This wildcat is in Rooks County.

MICHIGAN

MUSKEGON, Mich., June 12.—Reed Oil Co.'s No. 1 William J. Brinen wildcat, SW SW NW Section 13-13n-16w, Otto Township, Oceana County, struck salt water in the upper Traverse formation at 2,000 feet and suspended operations.

Government's Opportunity As Seen by W. R. Boyd, Jr.

ST. BONAVENTURE, N. Y., June 12. The Federal Government, through its current participation in the affairs of the petroleum industry, has an opportunity to serve the welfare of the entire nation without the handicap of competition so disastrous to earlier attempts to balance oil production with demand, it was said by William R. Boyd, Jr., executive vice president of the American Petroleum Institute, in an address here today.

He expressed the opinion that the petroleum industry wholeheartedly would co-operate with the Federal agency in the patriotic duty of preventing waste of the nation's oil resources, but warned that Government must maintain and retain the confidence of both the nation and the industry by its actions, and by results.

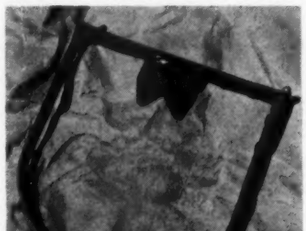
The vice president of the national petroleum trade association spoke at the commencement banquet of St. Bonaventure College, which earlier in the day conferred upon him the degree doctor of laws and dedicated a new hall of arts and sciences to Father d'Aillon, a Franciscan priest credited with having discovered the source of oil in the New World.

Simple Form Developed for Use When Applying Concrete to Pipe Lines

By M. W. ROBINSON
Engineer National Transit Co.

The use of concrete for the protection of pipe against soil corrosion has been practiced successfully on many of the oil pipe lines in the east, for 20 years or more.

The older applications were made, using a wooden box form with removable sides. Later a sheet of galvanized iron, rolled to a larger diameter than the pipe, was used, with small precast concrete blocks to hold the form away from the pipe at sides and bottom, with the form wrapped with wire to prevent its spreading when filled. Then, a shop-built form of the sectional type became popular. It was made of galvanized iron, in three sections, hinged together lengthwise and hung from a crossbar which rested on



Type of form strap hanger showing nail connection at upper left corner

top of the pipe, but required tar or building paper lining to prevent the concrete running through joints. These were made in 8-foot sections with drilled flange ends and sections joined by nails or bolts. They rendered good service but had several serious faults. They were extremely heavy, as all edges were bound with angle iron; the placing of lining paper took time; the hanging and removal of forms required close attention, and, due to the protruding angle iron, they could not be nested in a small space for transporting from job to job by truck, nor did they lend to easy handling on the job.

A simple form has been developed by the National Transit Company and has been in use for a year, which has overcome the objections of previous form types and has fulfilled the necessary functions. It consists of a galvanized iron form, rolled to a U-shape section, with a steel rod rolled into top of each leg of the U. These forms are lapped together for 2 inches and hung from the pipe by means of a separate strap hanger, which has the same U section as the form, with a cross-bar hinged to each end of the U, and carries a notched wedge, which rests on top of pipe. One side hinge of the hanger has open eyes, through which a nail is driven when form is placed. The straps are placed at each lap of the forms and one in middle of each 8-foot section. A few forms 4 feet long are used to allow placing concrete around normal bends in the pipe.

The forms shown in the photograph are on 6-inch pipes, through a section where "coal blossom" is prevalent in the soil, and permit of a 1-inch thickness of concrete around the pipe.

Concrete made of one part cement to three parts of clean sharp sand is thoroughly mixed using an amount of water to provide a consistency which will allow concrete to settle into forms with the aid of a small trowel or stick to compact it.

Forms are brushed with oil to prevent concrete adhering and their removal is as simple an operation as their hanging, the hinge nails are drawn, the strap hanger slipped down, and form pushed down and rotated slightly, and, on the 6-inch pipe size, require 2-inch clearance below concrete to remove. Upon removal of the forms, the only patching required is a teaspoonful of concrete where each hanger's non-locking wedge has rested on top of the pipe. The heavy wire used to support pipe during the concreting operation is cut off above the finished concrete, after the ditch has been partially filled in.

Method of line support for hanging of forms

MAGNETIC STORM

Tucson, Ariz., observatory of the U. S. Coast and Geodetic Survey reports a moderate magnetic storm started at 2 p.m. (C.S.T.) on June 4 and ended at 8 a.m. (C.S.T.) on June 7. The telegrams are:

"Storm began fourth. Twenty. Moderate."

"Storm ended seventh. Fourteen."

Tucson, Ariz., observatory of the U. S. Coast and Geodetic Survey reports a moderate magnetic storm began at 9 a.m. (C.S.T.) on June 11 and ended June 12 at 8 a.m. (C.S.T.). The telegram reads:

"Storm began eleven. Fifteen. Moderate. Ended twelve. Fourteen."

Reed Roller Bit Puts Representative in Tulsa

W. J. (Bill) Nutto is being placed in Tulsa by the Reed Roller Bit Co. as its representative, according to announce-

W. J. NUTTO

ment by Rex G. Hamaker, vice president in charge of sales for the company.

Mr. Nutto is well known throughout the Mid-Continent as an oil well drilling tool representative, having specialized during the last five years on the development and marketing of rotary drilling tools in this territory.

He graduated as a mechanical and mining engineer in 1922, after which he entered the employ of the Continental Motors Corp. as special production machine designer. A year later he joined the Chicago Pneumatic Tool Co. organization, where for six years he was engaged in the development of mining rock drills and in their introduction into practically every mine of Canada, United States and Mexico. Since June, 1929, his efforts have been directed to the development of oil well rotary drilling tools.

Mr. Nutto is connected with the Oklahoma branch organization of the Reed Roller Bit Co., which is headed by Howard B. Book, branch manager, whose office is at the branch shop of the company at Oklahoma City.

Results of Survey Upon Uniformity in Accounting

No uniformity in accounting practices exists in the oil industry, according to detailed replies received from 30 of the 36 oil companies that the New York Stock Exchange on February 5 asked for information concerning accounting policies with respect to certain enumerated eight different ways.

Ten companies reported that intangible drilling costs were charged against earnings and 12 companies that they were capitalized. In capitalizing intangible drilling costs eight companies amortized them through depreciation and depletion, two did not explain, one amortized production over the life of the property and one over a five-year period. Two companies capitalized such costs but set up reserves in full against income. Three companies reported that these costs did not apply to them, while each of three other concerns used different methods of treating such expenses.

Inventories of crude oil were valued in points.

Inventories of refined products were valued at the lower of cost or market by 13 companies; at average sales price or market by five companies; at cost by four companies; at average basis monthly cost by one company; at market with the part purchased at cost, by one company. Six companies replied that such valuations did not apply to them.

World Balance in Crude Oil Possible in 1934 and 1935 if Present Policies Are Continued

By V. R. GARFIAS and R. V. WHETSEL
Foreign Department, Henry L. Doherty & Co.

A favorable balance between crude oil demand and supply throughout the world appears assured for 1934 and 1935 provided the United States continues the curtailment program which has been in effect since last fall and other producing countries limit their output to increases in line with the enlarged world demand for petroleum products. If such a program is carried out over the remainder of 1934 and through 1935 the effect of the large excess overproduction in 1933 for which United States was largely responsible, will be overcome and the industry generally will be placed on a healthy basis through a substantial reduction in inventories.

This situation as regards supply and demand is summarized in the accompanying Table 1 showing the actual production by countries in 1933 and the estimated production for 1934 and 1935 with estimates as to the total demand for each of the three years. It will be noted that whereas supply exceeded the demand by 33,820,000 bbls. in 1933, it is estimated that 36,400,000 bbls. of oil will be withdrawn from storage in 1934 and 19,600,000 bbls. in 1935.

In the table, estimates of 1934 production for countries outside the United States are based entirely on their reported outputs for the first two months of this year. For the United States it is estimated that a daily average output of 2,400,000 bbls. will be maintained throughout the year. Although available reports from certain countries point to larger gains, world demand for crude oil in 1934 is estimated to be only 5 per cent greater than in 1933. The total demand for 1935 is estimated to increase 5 per cent over 1934 and the production for each country is allowed approximately a 5 per cent increase over 1934.

TABLE 1—ESTIMATED WORLD SUPPLY AND DEMAND FOR CRUDE IN 1934-35, BY COUNTRIES

(Thousands of barrels)

	1933	1934	1935
United States	898,874	876,000	920,000
Russia	147,077	157,000	165,000
Venezuela	120,882	124,000	130,000
Rumania	50,971	53,000	55,000
Persia	49,581	50,000	52,000
Dutch E. Indies	38,513	41,000	42,000
Mexico	33,905	35,000	37,000
Argentina	13,955	14,000	15,000
Peru	13,925	13,000	14,000
Colombia	13,157	14,000	15,000
Trinidad	9,560	10,000	11,000
British Indies	8,543	9,000	9,500
Poland	3,865	3,800	3,900
Sakhalin	2,600	3,000	3,200
Sarawak	2,288	2,300	2,500
Japan	1,935	2,000	2,100
Germany	1,721	1,800	1,900
Ecuador	1,623	1,700	1,800
Egypt	1,591	1,600	1,700
Iraq	1,200	3,000	20,000
Canada	1,147	1,200	1,300
Others	907	1,200	1,500
Total supply	1,417,820	1,417,600	1,506,400
Total demand	1,384,000	1,454,000	1,526,000
To storage	33,820	*36,400	*19,600

*Withdrawals from storage.

In 1935 it is assumed that Iraq crude oil will come into the world market to the extent of 20,000 bbls. daily. It is officially stated that crude oil deliveries from the pipe line now being completed connecting two Mediterranean terminals to the production of the interior, will start before the end of this year.

World Production

The world production of crude oil in 1933 was close to 1,418,000,000 bbls., or 113,000,000 bbls. greater than in the previous year. It is estimated that 1,354,000,000 bbls. were run through refineries compared to 1,301,000,000 bbls. during 1932. Approximately 63,000,000 bbls. went to local consumption and storage in 1933, about 30,000,000 bbls. of which was consumed as fuel and the remainder, or 33,000,000 bbls., went to storage. Compared to this figure it is estimated that in 1932 withdrawals of crude oil from storage throughout the world totaled about 26,000,000 bbls. In other words, the total world consumption of crude oil by refineries and as fuel was approximately 1,384,000,000 bbls. in 1933, or about 33,000,000 bbls. less than the output, while in 1932 the demand exceeded production by about 26,000,000 bbls. Shipments of crude oil from producing countries for refining in other countries totaled about 212,000,000 bbls. during the year, an increase of 10,000,000 bbls. over 1932 exports, which indicates the steady expansion of refining activities in countries that have little or no crude production of their own.

Crude oil movements in the most important countries were as follows:

United States

During 1933 the total production of crude oil in the United States after imports and exports exceeded refinery requirements by approximately 33,700,000 bbls. Of this amount about 18,000,000 bbls. were consumed as fuel and otherwise, and the remainder, 15,700,000 bbls., went to storage. In 1932 total supply after exports and imports lacked about 17,600,000 bbls. of meeting refinery demands and as about 18,600,000 bbls. were consumed, withdrawals from storage in 1932 total close to 36,200,000 bbls.

For the first time in several years exports of crude oil from the United States exceeded imports during 1933. Shipments out of the country were 36,703,000 bbls., an increase of 9,310,000 bbls. over 1932. About 53 per cent of the total exports went to Canada; France took 21 per cent and Japan 15 per cent. Imports of crude into the United States during 1933 were 32,773,000 bbls., or 11,915,000 bbls. less than in the previous year. Approximately 55 per cent of the total imports came from Venezuela, 24 per cent from Colombia and 17 per cent from Mexico, practically all of which were heavy crudes required for the manufacture of asphalt. With United States crude imports now well below exports, and such imports almost entirely confined to heavy crudes that are needed for the economical manufacture of asphalt on the Atlantic Seaboard, it is evident that it will not be necessary for the United States Government to further curtail crude imports by increasing duties or imposing quotas.

Russia

Production of crude oil in Russia during 1933 was 147,077,000 bbls., or 8,173,000 bbls. less than in 1932. Despite this decrease in production, it is estimated that more crude went to domestic storage during 1933 than in the previous year. While the second Russia five-year plan called for 173,000,000 bbls. of crude through local refineries in 1933 the throughput totaled only 131,591,000 bbls., as compared to 141,400,000 bbls. in 1932. This situation reflects the serious decline in 1933 of Russian domestic demand and foreign markets. Exports of crude from Russia in 1933 were practically the same as in the previous year, totaling about 3,826,000 bbls.

Venezuela

Production of crude in Venezuela totaled 120,882,000 bbls. in 1933, exceeding the output of the previous year by about 4,500,000 bbls. Exports of crude were approximately 112,300,000 bbls., about the same as in 1932. Crude runs to local refineries and domestic crude consumption indicates that despite increased production about 1,000,000 bbls. were withdrawn from storage during 1933. About 85 per cent of the crude shipments for the year went to the refineries of the Dutch West Indies, and approximately 14 per cent direct to the United States.

Colombia

In 1933 the crude output of Colombia decreased to 13,157,000 bbls., as compared to 16,390,000 bbls. in 1932. Exports totaled 11,806,000 bbls., being 3,676,000 bbls. less than in 1932. Shipments to the United States fell from 11,028,000 bbls. in 1932 to 7,391,000 bbls. in 1933.

France

Imports of crude oil into France increased from 7,245,000 bbls. in 1932 to 19,178,000 bbls. in 1933. Crude throughput of French refineries rose from 7,773,000 bbls. in 1932 to 19,009,000 bbls. in 1933. Such figures indicate the rapid progress of the French refining program, which has shown such favorable results during the past year as to greatly encourage other countries who have little or no production of their own to follow a similar policy. Toward the end of 1933 it was estimated that the annual capacity of French refineries had reached almost 28,000,000 bbls., an amount almost equal to the full capacity of the Iraq pipe lines and capable of producing 75 per cent of the French demand for refined products. In 1933 about 40 per cent of crude imports into France came from the United States; 26 per cent from Venezuela and Dutch West Indies, and about 20 per cent from Dutch East Indies and Persia.

There were but few changes in the crude oil movements of other important countries during 1933. Shipments of crude from Mexico increased about 1,000,000 bbls., reaching a total of 10,500,000 bbls. in 1933. About 55 per cent of this amount went to the United States and the remainder to Europe. Dutch West Indies refineries imported 93,474,000 bbls. all from Venezuela, and exported 8,449,000 bbls., about equal to 1932 movements. A marked increase in crude shipments to Japan took place the latter half of 1933, indicating renewed refining activity in that country. Crude imports to England reached 11,193,000 bbls. in 1933, or close to 1,000,000 bbls. greater than in the previous year. Production of Peru increased to 13,925,000 bbls. in 1933, or 40 per cent greater than in 1932. Exports of crude from Peru reached a figure of over 6,000,000 bbls., 42 per cent of which went to Canada and the remainder to European ports.

TABLE 2—WORLD CRUDE OIL BALANCE SHEET FOR 1933
(Thousands of barrels)

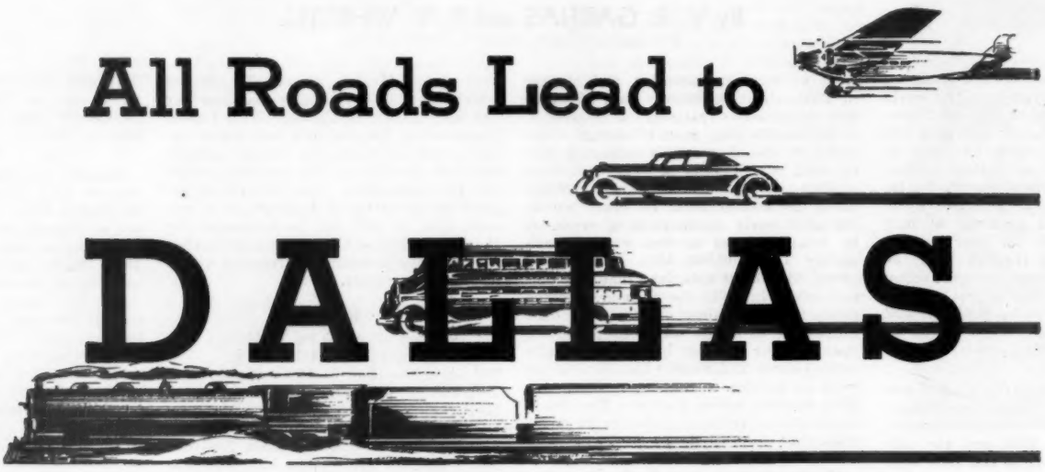
	Production	Imports	Exports	To local refineries	To local consumption and storage
United States	898,874	32,773	36,703	861,254	33,690
Russia	147,077	.....	3,826	131,591	11,660
Venezuela	120,882	.....	112,313	6,269	2,300
Rumania	50,971	.....	1,827	51,058	1,914
Persia	49,581	.....	8,647	37,600	3,334
Dutch East Indies	38,513	.....	6,671	32,700	858
Mexico	33,905	303	10,552	20,393	3,263
Argentina	13,955	1,328	.....	15,283	.....
Peru	13,925	.....	6,160	7,765	.....
Colombia	13,157	.....	11,806	1,050	301
Trinidad	9,560	.....	1,170	8,390	.....
British India	8,543	.....	.....	8,543	.....
Poland	3,865	.....	.....	4,032	167
Sakhalin	2,600	.....	2,180	.....	420
Sarawak	2,288	.....	720	.....	1,568
Japan	1,935	10,608	.....	8,126	4,417
Egypt	1,591	679	.....	2,270	.....
Ecuador	1,623	79	943	188	571
Germany	1,721	1,960	.....	3,681	.....
Canada	1,147	27,980	308	28,819	.....
Iraq	1,200	.....	.....	750	450
France	552	19,178	.....	19,009	721
Italy	183	875	.....	1,058	.....
Czechoslovakia	76	636	.....	712	.....
Bolivia	42	.....	.....	42	.....
Cuba	10	582	.....	592	.....
Dutch West Indies	.....	93,474	8,449	85,025	.....
United Kingdom	.....	11,193	.....	11,193	.....
Australia	.....	2,366	.....	2,366	.....
Austria	.....	1,387	.....	1,387	.....
Holland	.....	555	.....	555	.....
Yugoslavia	.....	360	.....	360	.....
Norway	.....	146	.....	146	.....
Sweden	.....	480	.....	480	.....
Hungary	.....	252	.....	252	.....
Canary Islands	.....	1,123	.....	1,123	.....
Belgium	.....	604	.....	604	.....
Latvia	.....	56	.....	56	.....
Others	44	3,339	41	.....	3,342
Total	1,417,820	212,316	212,316	1,354,722	63,098

PETROLEUM IMPORTS, EXPORTS

The following statistics for March, 1934, by the Department of Commerce:

Exports—	Bbls.
Petroleum, crude	2,581,854
Natural gasoline	121,407
Gasoline, naphtha, and other finished light products, in bulk	3,128,052
Gasoline, naphtha, and other finished light products, in containers	106,696
Illuminating oil, in bulk	573,905
Illuminating oil, in containers	82,939
Gas oil and distillate fuel oil	1,542,902
Residual fuel oil	860,871
Lubricating oil, red and pale	532,018
Lubricating oil, black	18,534
Lubricating oil, cylinder	231,760
	Gallons
Mineral spirits	162,753
Insulating or transformer oils	133,828
Light lubricating oils in small packages	57,107
	Pounds
Lubricating greases	7,168,167
Paraffin wax, unrefined	9,489,317
Paraffin wax, refined	11,673,450
Paraffin and paraffin wax	2,571,345
	Tons
Petroleum asphalt	18,455
Petroleum coke	7,441
Imports—	Bbls.
Petroleum, crude	2,272,422
Fuel oil, including topped petroleum	510,773
Unfinished distillates n.e.s.	8,803
Paraffin oil, not lubricating	1
Liquid derivatives of petroleum, n.e.s.	5,802
Gasoline and other motor fuel	69
Naphtha, not motor fuel	143
Illuminating oil, kerosene	695
Lubricating oils, including paraffin oil	426

All Roads Lead to DALLAS



for the

Fifteenth Annual Meeting

November 12, 13, 14, 15, 1934

of the

American Petroleum Institute

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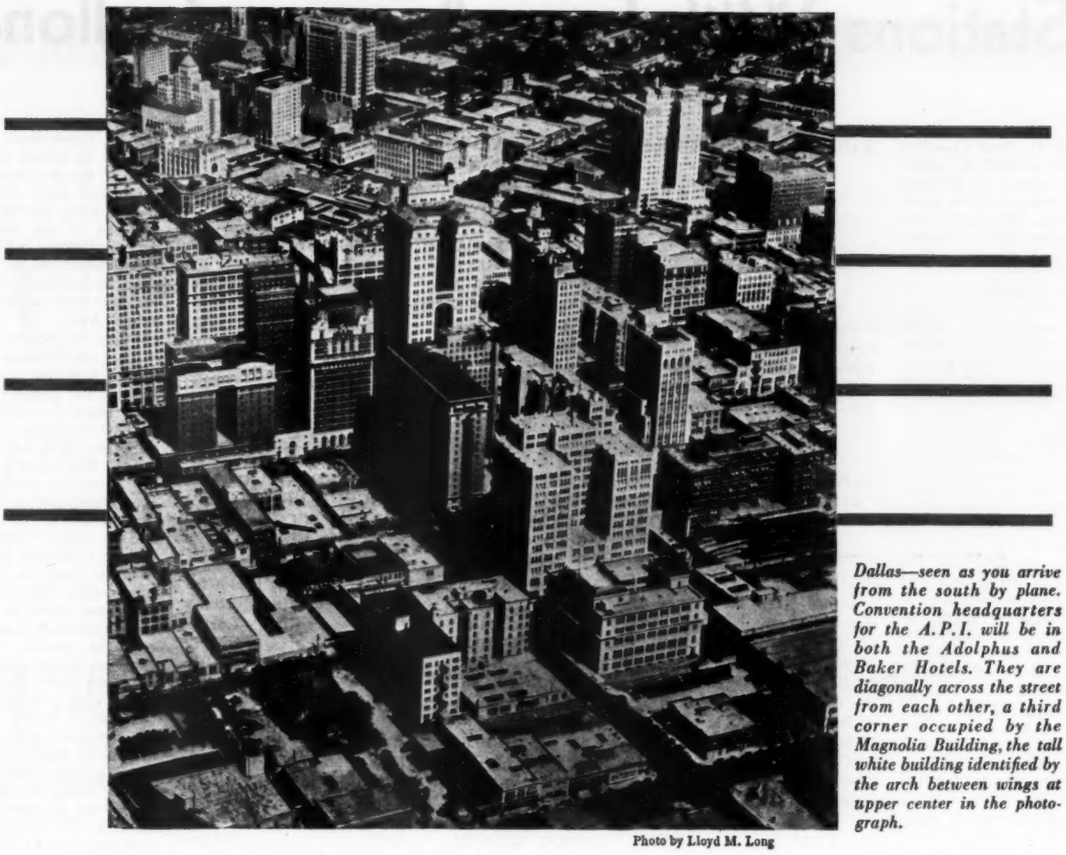
Dallas greets the A.P.I. Come by auto, plane, bus or train—all roads lead here where a vigorous Southwestern welcome awaits the oil men of a Nation. Dallas, geographical center of your oil empire, will become the petroleum headquarters of the world when the American Petroleum Institute meets here November 12-15, 1934.

We're accustomed to entertaining big conventions, but never before the A.P.I. So we've still got to show you what Dallas can do to take care of its guests in the real Texas manner. It's a responsibility we gladly assume, and pledge our best efforts to fulfill.

Come to Dallas, you of the A.P.I. Follow in the footsteps of progress, on the well-beaten trail to this capital of the Midcontinent Field.



Dallas—seen as you arrive from the south by plane. Convention headquarters for the A.P.I. will be in both the Adolphus and Baker Hotels. They are diagonally across the street from each other, a third corner occupied by the Magnolia Building, the tall white building identified by the arch between wings at upper center in the photograph.

Photo by Lloyd M. Long

$30,000,000 in Hotel Accommodations

Spacious hotels in the heart of the city, smaller ones near by, quiet apartment hotels in residential areas, clubs and modern tourist camps—whatever you desire in accommodations, you'll find here at a moderate rate. And with it you'll get that hearty welcome, typical of Dallas and the big Southwest.

Eight downtown hotels alone can accommodate 5,000 guests, and all in all Dallas' $30,000,000 worth of hotels have a capacity of around 20,000. Plenty of space to care for your comfort, and rates stay the same while conventions are here.

Decide now to visit Dallas this fall. Then write the reservation committee for details. Just say how many are coming with you, what you prefer in the way of accommodations and how much you want to pay for your rooms. It's our job then to arrange for your comfort while here — to make you feel happier than if you were home. Write the committee, not the hotels.

now open

RESERVATION COMMITTEE

for the American Petroleum Institute Convention

1311 Magnolia Building • • • • Dallas, Texas

Court Findings in West Virginia Show Number of Stations With Low Average Gallonage

By C. O. WILLSON

WASHINGTON, D. C., June 11.—The U. S. Supreme Court decided to entertain jurisdiction over appeal of officials of the State of West Virginia from lower court ruling invalidating the chain store tax levy against gasoline filling stations and service stations.

Owners of 227,000 automobiles, trucks and buses in West Virginia can purchase their gasoline requirements at 4,453 stations located within the State. These motorists buying 355,000 gallons of gasoline daily give the owners of these stations an average business of 80 gallons daily.

Of these 4,453 stations, a total of 2,453 units belong to companies and individuals operating two or more stations. The gross revenue of the stations is only a small percentage of the average for other chain organizations engaged in other lines of merchandising.

The largest station operator in the State out of a total of 948 lease and agency and dealer accounts has only 30 with a gasoline gallonage in excess of 200 gallons daily. Approximately one-third of these stations have a yearly gallonage of 10,000 gallons or a maximum of 27.5 gallons daily.

The foregoing are some of the conditions existing in the retail marketing end of the oil business in a representative state, as revealed in the recent decision of the Federal District Court for the Southern District of West Virginia in which it was held that that State's chain store tax did not apply to gasoline service stations. The legal angles of the decision have attracted wide attention due to its direct importance to the oil industry in other states where similar tax measures have been made effective or proposed. The decision followed that of the Indiana Supreme Court which held that the Indiana state chain tax applied to gasoline stations with the result that a large number of stations have been closed by their owners in recent months.

Aside from the legal phases of the West Virginia case the findings of the court are of interest due to the fact that they give an excellent summary of practices in the marketing end of the oil industry and point to conditions which appear inherently weak aside from the threatened attack in the form of special chain store taxes.

The plaintiff in the West Virginia case was the Standard Oil Co. of New Jersey, the largest distributor in the State and the decision also covered the pending cases of the Gulf Refining Co., Ashland Refining Co., and the Sinclair Refining Co., which are also large distributors of gasoline and other petroleum products in the State. This discussion and the accompanying tables are based on the court's findings of facts upon which the decision was based.

Small Gallonage

Outstanding in the court's findings was the relatively small volume of business done at a service station when compared with chain operators in other lines of business. This was of great importance because of the graduated provisions of the chain store tax which in effect meant that the large operators paid the maximum license levy whereas some of the other chains with only a few units did a much larger gross business. The following license fees per unit apply to store operation in the State: One store, $2; 2 to 5 stores, $5; 6 to 10 stores, $10; 11 to 15 stores, $20; 16 to 20 stores, $30; 21 to 30 stores, $35; 31 to 50 stores, $100; 51 to 75 stores, $200; more than 75 stores, $250.

TABLE 1—NUMBER OF STORES OR STATIONS IN WEST VIRGINIA AND GROSS REVENUE

	No. of units	Average gross revenue per unit	Total gross revenue	Total chain store tax
Sears, Roebuck & Co.	4	$140,715	$562,861	$19
Montgomery Ward Co.	7	151,154	1,058,083	45
S. S. Kresge Co.	12	140,428	1,685,141	118
F. W. Woolworth Co.	21	84,698	1,778,671	367
Kroger Grocery & Baking Co.	94	58,503	5,499,343	12,469
Great A. & P. Co.	198	62,400	12,455,017	38,521
Standard Oil Co. of New Jersey*:				
Company owned stations	98	26,822	2,628,615	23,569
All gasoline stations	1,046	6,145	6,428,701	251,573

*Includes tires and other products sold at stations. All data for 1932.

TABLE 2—GROSS REVENUE AND NET EARNINGS OF STANDARD OIL COMPANY OF NEW JERSEY FROM SALE OF PETROLEUM PRODUCTS IN WEST VIRGINIA AT LEASED AND DEALER ACCOUNTS GROUPED ACCORDING TO GALLONS OF MOTOR FUEL SOLD DURING 1932

Annual gallonage	No. of outlets	Average gross revenue	Average store tax	Average net earnings	Profit or loss after deducting store tax: Profit	Loss
0-10,000	319	$962.63	$240.51	$13.74	....	$266.77
10-20,000	247	2,579.25	240.51	51.30	....	189.21
20-30,000	155	4,396.22	240.51	115.02	....	125.49
30-40,000	96	6,105.16	240.51	156.42	....	84.09
40-50,000	56	7,907.19	240.51	183.24	....	57.27
50-60,000	22	9,615.20	240.51	136.68	....	103.83
60-70,000	23	11,626.03	240.51	257.56	$17.05	....
70-80,000	16	14,801.00	240.51	263.62	23.11	....
80-90,000	14	22,902.31	240.51	840.75	600.24	....
Total	948	3,892.82	240.51	89.75	....	150.76

Note: The net loss for 1932 totaled $142,917.

In 1933 it was shown that the Standard of New Jersey had 949 service or filling stations either through ownership or lease of the premises or through contractual relations with the owners or persons in control of the premises. This total consisted of 101 stations owned or leased by the company and generally classified as company owned stations. There were 388 stations, called leased outlets which are leased to the Standard company and operated by the lessor or some other person in control of the premises under commission contracts with the plaintiff. In other sections such stations are often known as lease and agency accounts. The remaining 460 stations at which the Standard company acquired by lease the right to store and sell its products were operated by the lessor or other person in control under commission contracts. These are usually classified as dealer accounts. In general the court found that the gallonage of the company owned stations per unit was the greatest followed by the lease and agency accounts with the dealer accounts showing the smallest gallonage.

This situation in relation to the gross business of concerns operating chains doing a department store or grocery store business is shown in Table 2. This table is based on 1932 operations when the Standard of New Jersey had a total of 1,046 stations of which 98 were company owned.

The unfairness of placing the retail marketing end of the oil business on the same basis as a department store in a chain tax plan is readily apparent from this table. The chain store tax in the case of a large department store such as operated by Sears-Roebuck and Montgomery Ward and the 5 and 10-cent stores of Kresge and Woolworth is of no importance when compared with gross revenue but in the case of the 1,046 filling stations of the Standard it was a tax of approximately 2½ per cent on the gross.

It is worthy of note that the average gross of the filling stations including the company owned units is far below the grocery stores of Kroger and A. & P. Ordinarily company owned stations represent a much greater investment than the chain grocery store and yet as shown in the table the average gross revenue is less than half. The 98 company owned stations of the Standard in 1932 represented an investment of $2,693,519 or an average of approximately $27,000.

In regard to the Standard stations it should be kept in mind that its company owned facilities and most of its controlled facilities now sell tires and other automobile accessories which adds materially to the gross revenue of the stations. A station averaging 50 gallons of gasoline per day and 1 gallon of motor oil will gross about $7.50 per day exclusive of taxes or $2,750 yearly. Most of the dealer accounts are under this average which means that if the gross exceed $7.50 per day it is obtained through the sale of other commodities or services.

Profit Situation

Just what these conditions mean in the way of profits is clearly shown in Table 2. Approximately one-third of the Standard outlets in 1932, not including the company owned facilities, sold less than 10,000 gallons of gasoline or less than 28 gallons daily. Of the 948 stations, a total of 721, or 75 per cent, sold less than 80 gallons daily. Only 53, or 6 per cent, had an average gallonage of 165 or more daily.

The margin of net profit in the operation of these small gallonage units is so narrow in recent years that the imposition of the average chain tax of $240.51 if it had been sustained by the court would have placed all but 53 of these stations in the red. The Standard presented figures which were checked by representatives of the State showing that the average net earnings of 319 lowest gallonage units were $13.74 for the year. After the chain tax this was changed to a loss of $266.77 per store.

The significance of these figures lies in the fact that a major marketing unit in the oil industry considers it necessary from a competitive angle to maintain these large number of small distributing units scattered throughout the State. The second obvious fact is that the operation position of these units is exceedingly vulnerable and if the trend toward chain store taxation continues and is finally upheld by the courts it will be necessary for the larger operators to drop them as part of their distribution system. The usual explanation given for these units is that a company desires representation in a certain territory and the amount of business available does not justify company owned stations or some other form of facility which would give a larger gallonage in a large consuming center. Even in the case of the stations with larger gallonage the margin of profit is relatively small and based on investment yields a very small return when compared with chain store operations in other lines of business. In brief, as the court pointed out, the distribution end of the oil business as now operated is characterized by heavy investments, a large number of units over widely scattered areas and small gross revenue per unit.

Company Owned Stations

Regarding the net earnings of the company owned stations for the years 1930, 1931, 1932, and the first eight months of 1933 the court found as follows: The average net earnings for 1930 for 105 stations was $3,000.98 per station; in 1931 for 96 such stations, $3,641.25 per station; in 1932 for 98 such stations, $1,782.78 per station and the first eight months of 1933, $109.72 per station exclusive of the chain store taxes.

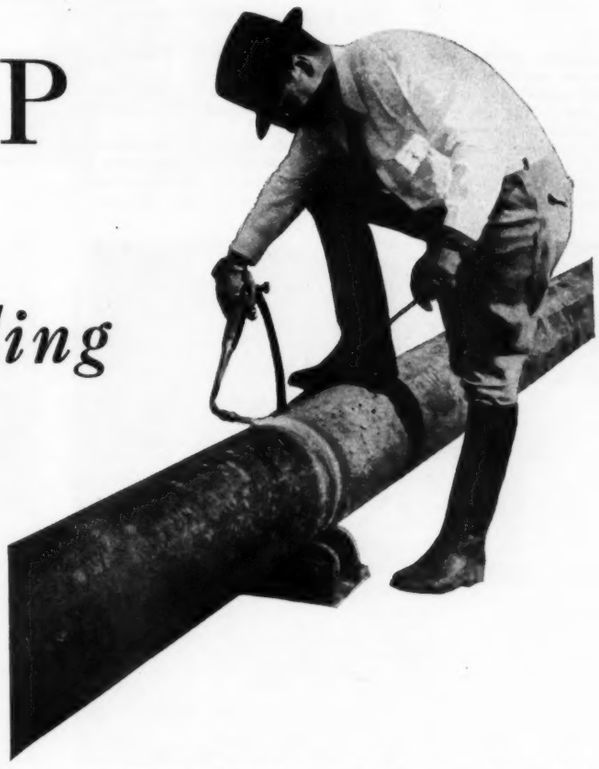
These data show that due to marketing conditions the operation of these large company facilities representing an average investment of $17,500 has become less and less profitable and including the state chain tax they were actually operated at a loss the first eight months of 1933. The margins allowed for marketing over the past three years have shown a steady decline in West Virginia and with no offsetting decreases in expenses the operating losses resulted. Aside from a consideration of the chain store taxes the obvious remedy lies in either a reduction in the number of distributing units or wider margins for those now operating.

The court found that despite the losses on the bulk of its stations the Standard of New Jersey operations in West Virginia were on a more favorable basis than its competitors. Regarding this situation the court found: "A consideration of the business of the other oil companies shows similar conditions. In fact, these figures show that the plaintiff's (Standard of New Jersey) operations in West Virginia were the most successful operations in the industry. Figures have been submitted for the Gulf Refining Co., Pure Oil Co., Ashland Refining Co.,

(Continued on Page 45)

"WE ORDER EVERYTHING FOR PIPE LINE WELDING FROM LINDE"

UP and UP go *Lindewelding Savings*



LINDEWELDING ten miles of 10-in. pipe was a small job for this company, which employs some of the best Lindewelders in the country. But Linde Process Service could *still* be of help.

Linde Service men showed them the latest Lindewelding technique. Where it formerly required 13 minutes per weld, it now takes less than ten. Similar savings were made in material costs. This additional efficiency was not gained through improvement in manual skill—but through use of the latest developments in Lindewelding.

Linde Process Service was able to boost the construction profit on this already well-organized pipe line. Progressive "pipe-liners" who, like this company, buy *everything for pipe line welding from Linde*, can depend on Linde Process Service to bring them the latest and best pipe-line welding methods, and to help organize welding operations for the greatest speed, soundness and profit.

With developments taking place from day to day, you may be losing money by not taking advantage of Linde Process Service. The nearest Linde Sales Office has the latest information on Lindewelding practices and will gladly show how you can profit by it.

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Users of products and processes developed by Units of Union Carbide and Carbon Corporation benefit from a most unique coordination of scientific research with manufacturing, sales and service facilities. You are cordially invited to visit this summer the numerous exhibits sponsored by the Corporation in both the Basic and Applied Science sections in the Hall of Science at Chicago's 1934 A Century of Progress Exposition.

Sales Offices:

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El Paso	Pittsburgh	

NRA

Tide Water Fills and Packs in Cartons 100,000 Cans of Motor Oil Daily at Bayonne Refinery

By D. P. MORAN
Supt. Package Manufacturing and Shipping Dept., Tide Water Oil Co., Bayonne, N. J.

In the new installation at the Bayonne, N. J., refinery of the Tide Water Oil Co. for canning motor oils, ready-made empty cans, open at the top, come to the refinery in sealed paper containers of 120 cans. These paper containers are sealed air-tight, and thus the possibility of dust or foreign matter entering the cans is eliminated.

Just before the empty cans are needed the paper containers are opened. The cans are conveyed to the end of long chutes at which point they are placed in the chutes in a horizontal position and permitted to roll down to the automatic fillers. Of course, it is not quite as simple as it sounds, because devices are necessary to facilitate the feeding of the cans to the automatic fillers at a rate of speed of 220 cans a minute.

Before the cans enter the filling machinery they are automatically upended. At this point cans and oil meet, the oil coming over independent lines from specially segregated stock tanks of Veedol. Once the can enters the fillers, it travels in a circular fashion and while in movement is filled. The device works as follows: As the can enters the filler it engages under the nozzle or valve of one of the many cylinders and is carried around in this position until ejected, by which time the can has received the full contents of the cylinder under which it was carried. If for any reason a can does not enter the filler, then no oil comes from the cylinder.

Filling Machine

The automatic features of the filling machinery are interesting, but its accuracy is almost supernatural. In a test for which 1,000 cans were selected, a variation of only one-tenth ounce or less was found. Exactly 97.2 per cent of the 1,000 cans tested showed they contained the correct quantity; 2.8 per cent showed variations of one-hundredth to one-tenth ounce. And this precision is secured at the rate of 110 cans a minute per machine.

As the filled cans leave the filling machine they are conveyed to the automatic closing and sealing device. The cans enter one end without any cover or top and come out of the other end with top rolled or double-seamed absolutely tight and leak-proof.

The can ends or covers are stacked in a chamber or hopper holding about 150 ends, or enough for 1¼ minutes of work. When the can enters the machine it touches a lever which releases one cover from the bottom of the stack. This cover then travels in the direction of and meets the can at a point where can and cover are rolled or double-seamed into one piece of metal.

Double-seaming means this: The metal of the can represents one thickness of tin, while the cover represents a second thickness. These two pieces of metal are rolled and double-rolled, until they represent five thicknesses of metal. The edge of the cover is coated with a special oil-proof sealing compound which makes the sixth thickness of material in this often misunderstood double seam.

How tightly these double seams are rolled is apparent from the fact that while the five thicknesses of metal represent 50/1,000-inch plus 1/1,000-inch for the sealing compound, the micrometer measurements of the finished double seam as it leaves the machine vary from this total of 51/1,000-inch only to the extent of the variations in the thickness of the tinplate—approximately 2/1,000 inch.

On leaving the sealing machine, the cans are turned on their side and rolled to the automatic packing machine which packs 24 cans in each carton.

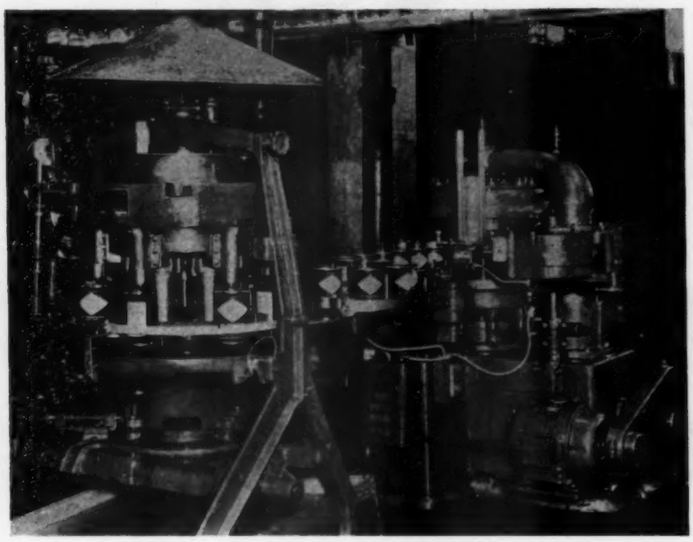
There are two lines of equipment, each line consisting of filling and sealing devices with a capacity of 110 cans per minute. These two lines merge or form into one line that delivers 220 cans a minute to the packing machine.

Packing Machine

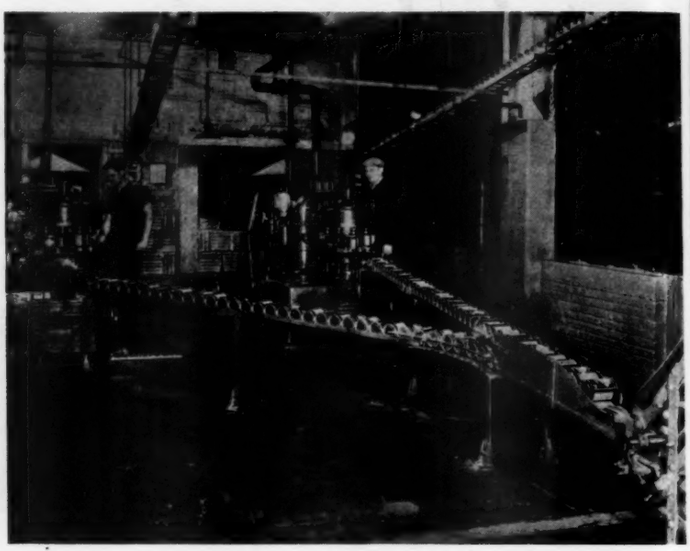
The packing machine accepts the filled and sealed cans in single file, but once inside operations bordering on magic are performed. At least this is the way it impresses the onlooker when he sees the cans in double tiers of three rows being gracefully but speedily pushed into the cartons.

After leaving the packing machine, the flaps of the cartons are loose, i.e., not yet glued, but in a few seconds they are transported to the carton gluer and sealer which does the job of closing the inner flaps, opens the outer flaps, applies glue to the outer flaps, closes the outer flaps and then passes the carton to a compression unit. In this unit the carton rests one minute, giving sufficient time for the glue to dry. The flaps become practically one solid unit.

From the carton sealer the cartons are transported to warehouse, truck, railroad car or boat. This is all done by means of an automatic conveyor system.



Automatic filling and sealing machine at Bayonne, N. J. canning installation of Tide Water Oil Co. Machine on left does filling and on right sealing



Two lines of cans each with a capacity of 110 cans per minute merge into one line on their way to the packing machine

Petroleum Equipment Suppliers' Problems Reviewed by President of Association

By W. L. CHILDS
President, American Petroleum Equipment Suppliers Association*

We, of the petroleum equipment industry and trade, have had our problems; we, too, have been troubled with unfair practices; we, too, have been faced with unfair competition.

The passing to customers of gratuities, gifts, or other payments or remuneration directly or indirectly was a pernicious evil.

The pirating of designs after large sums have been expended by others in engineering and research work has given us much concern.

The cancellation and deferred deliveries of orders has disrupted our manufacturing programs, has burdened our inventories, and has added to our expense.

Then, too, unwarranted optimism as to the amount of business in prospect has built up excessive inventories, which in times of rapid development such as the present mean subsequent sacrifices of obsolete stock.

The rendering of service beyond that which is reasonable, has in many cases, meant the sale of merchandise below cost.

The guaranteeing of products beyond the bounds of reason has caused great losses.

The extending of jobber's or wholesaler's prices to anyone who is not a jobber or wholesaler has worked a great hardship upon those you depend upon for your supplies.

The demanding by operators of long-term credits is another flagrant abuse.

The insistence by our customers on the purchase of more of their products than could be used within a reasonable time was unfair. The loan of products without compensation has made such transactions profitless.

The element of deceit and suspicion has not been missing from our operations.

We do not complain of competition. We enjoy a fight as much as anybody else; all we ask is that there be no "hitting below the belt" or "biting in the clinches."

In our industry, we have never before had a trade association or code of any kind.

Under the old order of things, we were unable to meet these problems in any substantial way and so, like many other industries, we "took it on the chin."

Under the New Deal

Under the new deal, however, we pro-

(Continued on Page 47)

*Before A.P.I., Pittsburgh, Pa.

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The name "Bridgeport" or "Super-Bridgeport" built into this hose is a warranty that this product is backed by the resources and the zealously guarded reputation of The Bridgeport Machine Company—a pledge of faith that the hose must make good, or the Company will.

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HOW TO GET IT

Contact our nearest store or field representative; or Phone or Wire, at our expense—COLLECT—to the nearest Bridgeport Sales Office.

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Pampa, Texas	**Okla. City, Okla.**	**Tulsa, Okla.**
McPherson, Kans.	**Russell, Kans.**	**Wichita, Kans.**

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MANUFACTURERS DISTRIBUTORS

OIL DRILLING-FISHING AND PRODUCTION EQUIPMENT

GENERAL OFFICE AND WORKS: WICHITA, KANSAS

BRANCH STORES: ACTIVE MID-CONTINENT AND GULF COAST FIELDS

Mid-Continent Refiners Continue to Curtail Crude Runs in Order to Support Motor Fuel Market

By W. T. ZIEGENHAIN

June promises to pass with little change in the Mid-Continent refinery crude runs. Estimates based upon the first two weeks' operations and subject later to some change on the part of individual plants due to protests filed with the review board and the national allocator show that an average of 459,908 bbls. of crude will be processed daily which compares with 457,165 bbls. in May. This small difference in the total for the Mid-Continent is also obtained in each of the eight divisions of the Mid-Contnent. The North Central Texas group, East Texas, West Texas, North Louisiana and Southwest Texas groups each recorded but a small addition to its total crude runs while Oklahoma, Kansas and Arkansas have each reduced total runs slightly.

This constructive move to curtail runs just before the major marketing season is due to two factors. First, there is a genuine desire on the part of the great majority of refiners to co-operate with the local allocators to hold the production of gasoline within that set by the P. and C. committee. Second, there is no thought of crude prices advancing over the immediate future to warrant adding to present refinery stocks.

At this season in many past years there is usually a substantial rise in the rate of refining operations and this is carried on through the greater part of the summer, only to find that by fall, production had kept up with the demand better than had been anticipated and the August and September market served as a dumping time for those who had erred.

Crude Prices

Crude is readily available throughout the Mid-Continent and at the posted price. About three months ago some students of the crude market predicted a mild shortage by mid-summer but this does not seem likely now. In fact, many East Texas producers, crude buyers and refiners there have made tentative plans to take advantage of any "blow up" of the present control there which might follow the failure of congress to pass the much needed oil bill.

Others take this attitude due to the failure of the Texas district appellate court sitting at Texarkana to rule in favor of the Texas Railroad Commission, which ruling makes it impossible for the commission to examine the books of plant operators there.

There is no rush at present, however, for East Texas refiners to increase runs for they have witnessed difficulty in moving their current production. Some material is currently purchased by outside refiners but the volume is not enough to encourage increased crude runs. Much of the truck business that East Texas refiners enjoyed has been taken from them by outside plants and more of the East Texas gasoline has had to find its way to market in tank cars. While these factors have acted to hold down East Texas refinery runs it should be recognized that a majority of the larger and more substantial refiners in the group have co-operated in a most constructive manner to help maintain a normal market throughout the Mid-Continent. In the month which just passed, East Texas refiners reduced their runs while refiners in the balance of the Mid-Continent showed slight increases.

Changes in East Texas

May did not pass without a full schedule of name changes, new plants and company reorganizations in the East Texas area. To the list has been added the names of the Acme Refining Co. which now operates a 500-bbl. plant at Gladewater; East Texas Refined Products Co., which operates a 1,500-bbl. plant at Kilgore; Friar Topping & Refining Co., operating a 500-bbl. unit at Friars Switch; the L. & G. Refining Co. at Kilgore, which operates a 500-bbl. topping plant; Longregg Refining Co., which operates a 1,500-bbl. skimming plant at Kilgore; Ocean Refining Co., operating a 2,000-bbl. plant at Kilgore; Pelican Refining Co. at Gladewater, operating a 500-bbl. unit; Ward Refining Co. at Gladewater, operating a 500-bbl. skimmer, and the Wolf Refining Co. at Kilgore, operating a 1,000-bbl. topping unit. Plants undergoing a name change include the Davenport Refining Co., now the Price Refining Co.; Dutch Rose Refining Co., now the Ideal; Hanover Refining Co., now the Standard Process Co., and Southern Refining Co., now Overton Refining Co. No. 2.

Mid-Continent Refinery Operations

Average Daily Crude Runs (Barrels)

(Based on estimates compiled first of each month by The Oil and Gas Journal)

	1929	1930	1931	1932	1933	1934
January	508,550	535,460	478,795	405,910	399,405	448,360
February	506,800	519,355	470,125	411,280	407,125	456,619
March	514,950	531,500	449,634	401,155	423,445	465,680
April	530,530	555,250	497,391	419,750	441,000	458,220
May	577,500	574,300	510,540	436,160	470,460	457,165
June	583,030	572,250	567,915	440,765	479,987	459,908
July	565,800	548,475	588,840	433,255	525,845	.....
August	555,250	526,400	590,545	427,710	518,510	.....
September	552,300	498,710	588,105	430,430	526,749	.....
October	544,720	518,800	472,190	401,995	495,756	.....
November	545,473	506,700	480,440	408,180	481,335	.....
December	540,630	478,360	456,525	416,275	434,275	.....

Operations by Refinery Districts

	June dly. crude capacity	June dly. crude runs	May dly. crude runs	June daily increase
Arkansas	37,550	20,650	20,850	*200
East Texas	101,850	68,510	66,560	1,950
Kansas	182,650	98,150	99,830	*1,680
North Central Texas	107,800	43,110	39,995	3,115
North Louisiana	41,750	28,000	27,875	125
Oklahoma	297,300	134,870	137,635	*2,765
Southwest Texas	26,600	13,290	12,940	350
West Texas and Panhandle	102,475	53,328	51,480	1,848
Total	987,975	459,908	457,165	2,743

*Decrease.

NORTH CENTRAL TEXAS

Company and location—	Daily capacity	Aver. daily runs June	Aver. daily runs May
All State Refining Co., Thrall	2,300	(*)	(*)
Archer Refining Co., Megargel	1,500	300	300
Atlantic, Pacific & Gulf Refining Co., Wichita Falls	5,000	(†)	(†)
Baird Refining Co., Baird	1,400	800	800
Canyon Oil & Gas Co., Inc., The, Cisco	500	100	100
Continental Oil Co., Wichita Falls	6,000	4,250	4,250
Empire Oil & Refining Co., Gainesville	5,000	3,000	2,500
Exchange Petroleum Corp., Albany	500	200	200
Falls Refining Co., Wichita Falls	2,000	250	350
Gratex Refining Co., Graham	500	110	100
Gulf Refining Co., Fort Worth	10,000	4,000	4,400
Gulf Refining Co., Sweetwater	5,000	4,000	4,000
Haskell Oil Refining Corp., Breckenridge	200	(*)	(*)
Jacksboro Refining Co., Jacksboro	50	50	20
LaSalle Petroleum Co., Burkburnett	3,500	300	300
Magnolia Petroleum Co., Fort Worth, No. 1	12,000	4,500	4,000
Magnolia Petroleum Co., Fort Worth, No. 2	6,000	(*)	(*)
Marathon Oil Co., Fort Worth	5,000	3,300	4,000
Moutray Refining Co., Hawley	600	200	150
Muenster Refining Co., Muenster	300	150	120
New Deal Refining Co., Abilene	300	250	190
Nolting Refining Co., Sweetwater	1,000	50	50
Margold Refining Co., West Olney	400	200	200
Octane Refining Co., Chautauqua	500	350	350
Olney Oil & Refining Co., Olney	3,000	1,700	1,600
Omega Refining Co., Brownwood	200	(*)	(*)
Panhandle Refining Co., Wichita Falls	5,000	2,500	2,350
Paragon Refining Co., Lueders	400	175	160
Pentex Refining Co., Echo	400	(*)	(*)
Petroeum Oil Interests, Inc., Brownwood	1,000	500	500
Pilot Point Refining Co., Pilot Point	500	100	100
Sinclair Refining Co., Fort Worth	5,000	1,800	1,800
Southtex Refining Co., Trent	250	150	150
Southland Refining Co., Olney	1,000	(*)	(*)
Starlight Refining Co., Inc., Ballinger	300	180	180
Star Refining & Producing Co., Fort Worth	1,000	500	600
Superior Refining Co., Tiffin	800	(*)	(*)
Taylor Refining Co., Taylor	6,000	500	500
Taxman Refining Co., Wichita Falls	3,000	3,100	2,600
Texas Pacific Coal & Oil Co., Fort Worth	3,000	2,500	2,000
Texas Pacific Coal & Oil Co., Caddo	1,000	600	800
Tucker Refining Co., Wichita Falls	200	130	125
Waggoner Refining Co., Electra	6,000	2,200	50
Watt Refining Co., Brownwood	200	100	100
Total	107,800	43,110	39,995

*Shut down. †Cracking only.

EAST TEXAS

Company and location—	Daily capacity	Aver. daily runs June	Aver. daily runs May
Acme Refining Co., Gladewater	500	150	(*)
Archer Refining Co., Gladewater	1,000	(*)	(*)
Arpana Refining Co., Arp	4,000	3,900	3,000
Arrow Refining & Producing Co., Overton	5,000	4,500	2,800
Artex Refining Co., No. 2, Arp	1,500	(*)	(*)
Bartlett Refining Co., Kilgore	200	(*)	(*)
Beacon Oil & Refining Co., Henderson	4,500	1,800	2,100
Carnation Refining Corp., Gladewater	1,000	(*)	500
Century Refining Co., Friars Switch	2,000	1,500	1,200
Chief Refining Co., Gladewater	1,500	700	625
Crow Refining Co., Gladewater	500	(*)	(*)
Culver Refining Co., Gladewater	400	(*)	150
Danciger Refineries, Inc., Longview	10,000	(*)	(*)
East Texas Refined Products Co., Kilgore	1,500	1,100	(*)
East Texas Refining Co., Longview	10,000	6,500	6,000
Foshee Refining Co., Gladewater	1,500	(*)	1,000
Friar Topping & Refining Co., Friars Switch	1,500	280	(*)
Gilliland Refining Co., Gladewater	2,000	1,600	1,250
Gilmer Refining Co., Gilmer	500	(*)	(*)
Godlin Refining Co., Gladewater	850	200	600
Good Refining Co., Gladewater	1,000	170	700
Goodson-Gentry Refining Co., Gladewater	1,200	200	(*)
Goodson Refining Co., Kilgore	1,500	1,000	1,100
Humble Oil & Refining Co., Neches	5,000	1,100	400
Ideal Refining Co., Gladewater	750	110	200
Johnson Refining Co., Kilgore	1,000	500	900
Kent Refining Co., Angus	4,000	(*)	(*)
Kilgore Refining Co., Kilgore	3,000	1,300	1,350
Kil-Tex Refining Co., Kilgore	500	300	(*)
L. & G. Refining Co., Kilgore	500	200	(*)
Lake Refining Co., Gladewater	1,700	1,300	1,200
La Pren Refining Co., Kilgore	1,500	750	(*)
Lindsey Refining Co., Gladewater	2,500	1,800	1,400
Locke Refining Co., No. 1, Gladewater	1,500	(*)	(*)
Locke Refining Co., No. 2, Gladewater	1,500	1,400	1,100
Lone Star Refining Co., Kilgore	2,000	800	(*)
Longregg Refining Co., Kilgore	1,500	200	(*)
Lotus Refining Co., Gladewater	1,500	650	730
Magnolia Petroleum Co., Corsicana	5,000	2,300	2,300
Master Petroleum Co., Waco	1,000	400	400
Minerva Refining Co., Minerva	2,000	400	400
Ocean Refining Co., Kilgore	2,000	1,400	(*)
Oil Refineries, Inc., Overton	4,000	(*)	1,500
O.K. Topping Co., Kilgore	1,000	220	175
Oriental Oil Co., Dallas	5,000	(*)	(*)
Overton Refining Co., No. 2, Reeds Switch	2,500	1,000	(*)

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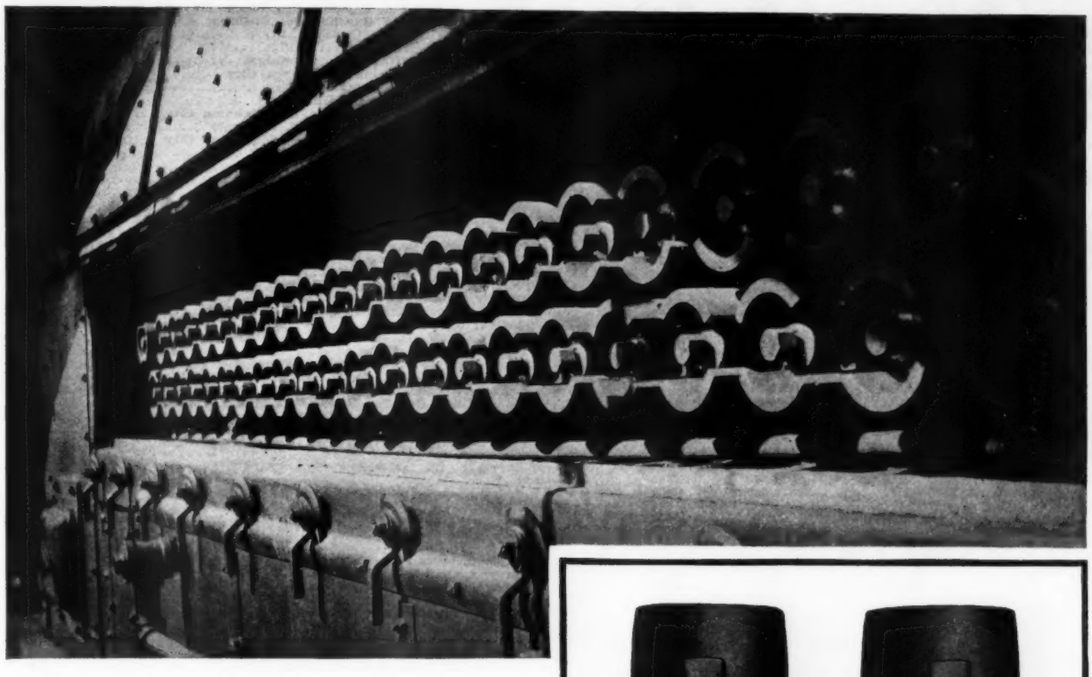
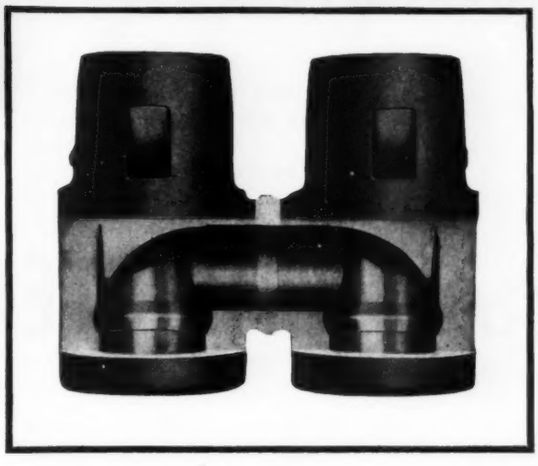
KELLOGG FORGED RETURN HEADERS





The body of the Kellogg "Smooth-flow" return header is composed entirely of forged material with the consequent soundness, toughness and reliability commonly found in a forging.

These headers can be furnished in plain carbon or alloy steel, in all standard sizes, in the conventional two hole return header, the box-elbow type or the multiple-hole type.

Inquiries should include data regarding furnace tube diameter, operating pressure and temperature, center to center dimension of tubes and material preferred.

A Kellogg "Smooth-flow" header sectioned to expose the flow line, the walls of the cross-over section and the deflector plugs.

KELLOGG

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Pressure vessels "Masterweld" for the Power, Refinery and Chemical Industries. Power Plant and Industrial piping. Heat Exchangers. Radial Brick Chimneys, Plastic Refractories. Cross, Holmes-Manley, de Florez and Tube and Tank cracking units, absorption plants and pipe stills. Pacific Hot Oil Pumps—de Florez Temperature Control.

EAST TEXAS (Continued)

Company and location—	Daily capacity	Aver. daily runs— June	May
Overton Refining Co., Overton	3,500	1,700	1,500
Owl Refining Co., Kilgore	1,800	500	1,000
Panama Refining Co., Kilgore	2,500	2,400	2,200
Pelican Refining Co., Gladewater	500	400	...
Pennant Refining Co., Kilgore	1,000	(*)	425
Phoenix Refining Co Inc., Dallas	1,000	500	500
Price Refining Co., Gladewater	500	70	(*)
Producers Refining Co., Reeds Switch	2,000	(*)	350
Recla Refining Co., Turnerstown	200	(*)	(*)
Roca Refining Co., Kilgore	2,200	1,600	(*)
Rusk Oil & Refining Co., Overton	3,000	(*)	(*)
S. & E. Refining Co., Omega	200	(*)	(*)
Sandy Refining Co., Big Sandy	1,000	150	250
Simms Oil Co., West Dallas	4,000	1,500	(*)
Sinclair Refining Co., Camps Switch	5,000	3,000	1,200
Solar Refining Co., Overton	3,000	1,200	2,000
Southport Refining Co., Kilgore	2,500	700	2,500
Standard Process Co., Kilgore	1,000	455	(*)
Star Creek Refining Co., Kilgore	2,000	(*)	300
Supreme Refining Co., Gladewater	1,000	100	450
Taylor Refining Co., Tyler	15,000	560	550
Texanna Refining Co., Kilgore	200	(‡)	(‡)
Texas Co., Dallas	16,000	10,000	10,000
Texas Oil Products Co., Gladewater	2,000	(*)	800
Texas Refining Co., No. 1, Kilgore	1,000	(*)	800
Texas Refining Co. No. 2, Gladewater	1,000	450	450
Texas Refining Co., No. 2, Gladewater	2,000	500	(*)
Trico Refining Co., Turnerstown	200	(*)	(*)
Trio Refining Co., Arp	1,500	850	1,250
Tyler Refining Co., Arp	2,000	700	1,350
Union Refining Co., Camps Switch	3,000	1,300	1,100
Unit Refining Co., Kilgore	200	(*)	(*)
Upshur Refining Co., Gladewater	1,000	235	450
Utah Refining Co., Kilgore	2,000	590	1,250
Ward, Walrip & Stevens Refining Co., Gladewater	500	50	(*)
Wichita Refining Co., Gladewater	750	(*)	(*)
Wolf Refining Co., Kilgore	1,000	100	(*)
Total	191,850	68,510	66,560

*Shut down. ‡Running tops only.

WEST TEXAS AND PANHANDLE

Company and location—	Daily capacity	Aver. daily runs— June	May
Active Oil Co., Arno	1,500	(*)	(*)
Aero Refining Co., Pecos	225	100	65
Coltex Refining Co., Colorado	10,000	6,558	5,500
Concho Refining Co., San Angelo	250	80	75
Coaden Oil Co., Big Spring	12,500	6,000	6,000
Danciger Refineries, Inc., Pampa	6,500	6,000	6,000
Howard County Refining Co., Big Spring	1,500	200	190
McNutt Refining Co., El Paso	2,000	800	750
Panhandle Refining Co., Kings Mill	2,000	1,400	1,000
Paramount Refining Co., San Angelo	2,000	(*)	(*)
Pasotex Petroleum Co., El Paso	14,000	5,500	5,500
Phillips Petroleum Co., Borger	30,000	20,000	20,000
Shamrock Oil & Gas Co., Sunray	2,000	1,300	1,000
Shamrock Oil & Gas Co., Meldavis	1,000	1,000	1,000
Sinclair Refining Co., El Paso	2,500	800	800
Texas Co., El Paso	2,000	600	600
Texas Co., Amarillo	4,000	3,000	3,000
West Texas Refining Co., Pecos City	6,000	(*)	(*)
Wickett Petroleum Co., Wickett	2,500	(*)	(*)
Total	102,475	53,328	51,480

*Shut down.

OKLAHOMA

Company and location—	Daily capacity	Aver. daily runs— June	May
Anderson-Prichard Oil Corp., Cyril	6,000	3,569	4,000
Altitude Petroleum Corp. (J. H. Peacock Refining Co.), Oklahoma City	3,000	(*)	300
Associated Petroleum Corp., Allen	8,000	(*)	(*)
Barnsdall Refineries, Inc., Barnsdall	6,000	3,000	3,000
Barnsdall Refineries, Inc., Okmulgee	10,000	4,000	3,500
Bell Oil & Gas Co., Grandfield	4,500	1,900	2,200
Black Gold Refining Co., Oklahoma City	2,500	1,500	1,500
Century Petroleum Corp., Oklahoma City	2,500	(*)	(*)
Champlin Refining Co., Enid	16,000	6,000	6,000
Columbia Oil Corp., Oklahoma City	3,500	(*)	(*)
Continental Oil Co., Ponca City	30,000	17,000	17,000
Crescent Refining Co., Holdenville	1,000	(*)	(*)
Cushing Refining & Gasoline Co., Blackwell	1,700	1,500	1,500
Cushing Refining & Gasoline Co., Cushing	4,500	3,000	3,000
Deep Rock Oil Corp., Cushing	10,000	9,000	9,000
Eason Oil Co., Enid	5,000	2,700	2,500
Empire Oil & Refining Co., Okmulgee	4,000	2,000	2,000
Empire Oil & Refining Co., Ponca City	12,000	8,200	7,400
Gem Refing Co., Oklahoma City	1,000	(*)	(*)
Globe Oil & Refining Co., Blackwell	7,500	6,000	6,000
Government Refining Co., No. 1, Oklahoma City	1,000	(*)	(*)
Government Refining Co., No. 2, Seminole	300	(*)	(*)
Government Refining Co. No. 3, Oklahoma City	3,500	255	200
Hanger Refining Co., Oklahoma City	1,000	250	340
Johnson Oil Refining Co., Cleveland	6,000	4,000	3,200
Major Petroleum Products Co., Oklahoma City	2,000	800	725
Marathon Oil Co., Bristow	5,000	2,300	2,400
Mid-Continent Petroleum Corp., West Tulsa	40,000	18,000	18,000
Oklahoma City Refining Co., Oklahoma City	2,500	(*)	(*)
Phillips Petroleum Co., Okmulgee	6,000	5,300	5,300
Producers Oil Co., Bristow	2,500	(*)	(*)
Producers & Refiners Corp., West Tulsa	6,000	3,000	3,000
Pure Oil Co., Muskogee	9,000	6,000	6,000
Rock Island Refining Co., Beckett	6,000	3,200	3,200
Sinclair Refining Co., Sand Springs	8,000	2,400	3,400
Sooner State Refining Co., Oklahoma City	300	(*)	(*)
Sun Oil Co., Yale	5,000	2,000	2,000
Sunray Oil Co. (C. E. Wright, receiver), Allen	7,000	2,000	2,000
Texas Co., West Tulsa	15,000	4,500	4,000
Texas Pacific Coal & Oil Co., Wynnewood	3,000	600	600
Tide Water Oil Co., Drumright	15,000	8,000	8,000
Triangle Producing & Refining Co., Oklahoma City	1,000	600	480
Wilcox Oil & Gas Co., Bristow	5,000	(*)	(*)
Wirt Franklin Petroleum Corp., Ardmore	4,000	1,800	1,800
Yale Oil Corp., Yale	2,000	500	350
York Refining Co., Oklahoma City	2,000	(*)	(*)
Total	297,300	134,870	137,635

*Shut down.

ARKANSAS

Company and location—	Daily capacity	Aver. daily runs— June	May
Berry Asphalt Co., Waterloo	2,000	500	500
Henry H. Cross Co., Smackover	6,000	3,000	3,000
Lion Oil Refining Co., El Dorado	12,000	6,000	6,000
Macmillan Petroleum Products Co., Norphlet	2,300	2,000	2,000
Ouachita Valley Refining Co., El Dorado	1,500	1,200	1,200
Root Refining Co., El Dorado	10,000	5,400	5,400
Simms Oil Co., Smackover	3,000	2,300	2,500
Stephens Refining Co., Stephens	750	250	250
Total	37,550	20,650	20,850

(Continued on Next Page)

Yes, IT'S THE STEEL

IT'S THE CUSTOM-MADE STEEL THAT SPELLS THE DIFFERENCE!

CUSTOM-MADE Steel? What does it mean? It means just this...that the steel for Roebling Welding Wire is made specifically for welding purposes. It is *not* made on the usual tonnage basis but in small open-hearth furnaces... Of special, pure melting stock...By custom methods that permit exceptionally close control of the melt.

RESULT: A welding wire for exacting welders, free of non-metallic inclusions and absolutely uniform in quality.

We would welcome your request for full information and samples of both electric and gas types.

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Welding Wire Distributors for Oil Fields
FRICK-REID SUPPLY CORPORATION
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ROEBLING *Custom-Made* WELDING WIRE

SOUTHWEST TEXAS

Company and location—	Daily capacity	Aver. daily runs— June	May
Amsco Refining Co., Mirando City	2,500	800	850
Bee Oil & Refining Co., Pettus	1,000	100	100
Capital Refining Co., Luling	2,500	(*)	(*)
Chapa Refining Co., Laredo	100	500	500
Humble Oil & Refining Co., San Antonio	5,000	2,800	2,490
Magnolia Petroleum Co., Luling	7,000	3,650	3,650
Pettus Refining Co., Pettus	1,000	500	500
Phoenix Refining Co., San Antonio	500	420	420
Pioneer Oil & Refining Co., Somerset	1,500	850	850
Price Refining Co., San Antonio	500	70	70
Rado Refining & Producing Co., McAllen	500	200	200
Texas Co., San Antonio	3,000	3,000	3,000
Texas Petroleum Products Co., Somerset	1,500	400	400
Total	26,600	13,290	12,940

*Shut down.

KANSAS

Company and location—	Daily capacity	Aver. daily runs— June	May
Altitude Petroleum Corp., Chanute	5,000	(†)	(†)
Barnsdall Refineries, Inc., Wichita	4,000	2,500	3,000
Derby Oil Co., Wichita	8,000	4,000	4,000
Dickey Refining Co., McPherson	5,000	800	800
Eldorado Refining Co., Eldorado	5,000	3,800	3,200
Falcon Refining Co., Inc., Great Bend	700	500	510
Globe Oil & Refining Co., McPherson	10,000	7,500	7,200
Golden Rule Refining Co., Wichita	1,500	(*)	700
Kanotex Refining Co., Arkansas City	12,000	5,500	4,500
Kansas Gas & Gasoline Co., Winfield	500	100	70
Kreuger Refining Co., Laton	150	50	50
National Refining Co., Coffeyville	6,500	4,500	4,500
Petroleum Products Co., Chanute	700	1,000	400
Phillips Petroleum Co., Kansas City	15,000	15,000	15,000
Security Petroleum Co., Chase	3,100	100	100
Shell Petroleum Corp., Arkansas City	20,000	12,000	15,000
Sinclair Refining Co., Coffeyville	12,000	(*)	(*)
Sinclair Refining Co., Argentine	9,500	4,500	4,500
Skelly Oil Co., Eldorado	23,000	14,500	14,500
Standard Oil Co. of Kansas, Neodesha	20,000	5,000	5,000
United Oil & Refining Co., Hutchinson	1,500	(*)	(*)
Vickers Petroleum Co., Potwin	3,500	2,800	2,800
White Eagle Refining Co., Augusta	16,000	14,000	14,000
Total	182,650	98,150	99,330

*Shut down. †Operating cracking unit, using gas oil.

NORTH LOUISIANA

Company and location—	Daily capacity	Aver. daily runs— June	May
Bayou State Refining Co., Hosston	750	300	225
Cedar Grove Refining Co., Shreveport	1,000	(*)	(*)
Louisiana Oil Refining Co., Shreveport, Bossier	19,000	21,000	20,950
Shreveport Refineries, Inc., Shreveport	500	200	200
Spartan Refining Co., Shreveport	10,000	4,500	4,500
Stanolind Oil & Gas Co., Vivian	3,500	2,000	2,000
Texas Co., Shreveport	7,000	(*)	(*)
Total	41,750	28,000	27,875

*Shut down.

Ethyl Gasoline Corp. Will Answer Questions at Fair

Those who attend the Chicago exposition will see automatic showmanship of the highest order in the Ethyl Gasoline Corp.'s display. By mechanical means the visitor will have questions answered, learn what causes the knock in an automobile motor and learn how it may be eliminated.

The display is composed of two main features, the more important of which is a single cylinder engine mounted in a glass case which operates continuously but alternates the fuel on which it runs. For a brief period it is operated on ordinary gasoline and then by automatic means the fuel supply is changed over to the same gasoline containing Ethyl brand of antiknock compound or Ethyl fluid, as it is commonly known. The fuel intake is through a carburetor having visible glass bowls so that the spectator can see the fuel on which the engine is operating at any given time.

When the engine is operating on the untreated fuel there is a visible knock emanating from it. In addition to this, large dials located above the engine show that the speed in revolutions per minute and the power in watts and horsepower decrease as knock becomes more intense, while the operating temperature of the engine, in degrees Fahrenheit, increases. Conversely, when the engine is operated on the fuel treated with Ethyl fluid the temperature comes down and the speed and power go up as knock is eliminated. There is, of course, no audible sound or knock when the engine is operated on the treated fuel.

Located on either side of the engine display are photographic screens. On the left side of the engine the screen supports an outline map of the United States showing contours of each state. Above the screen the question is asked:

"Under what name is Ethyl Gasoline sold in your state?"

The direction is given:

"Dial the answer on the electric questionnaire."

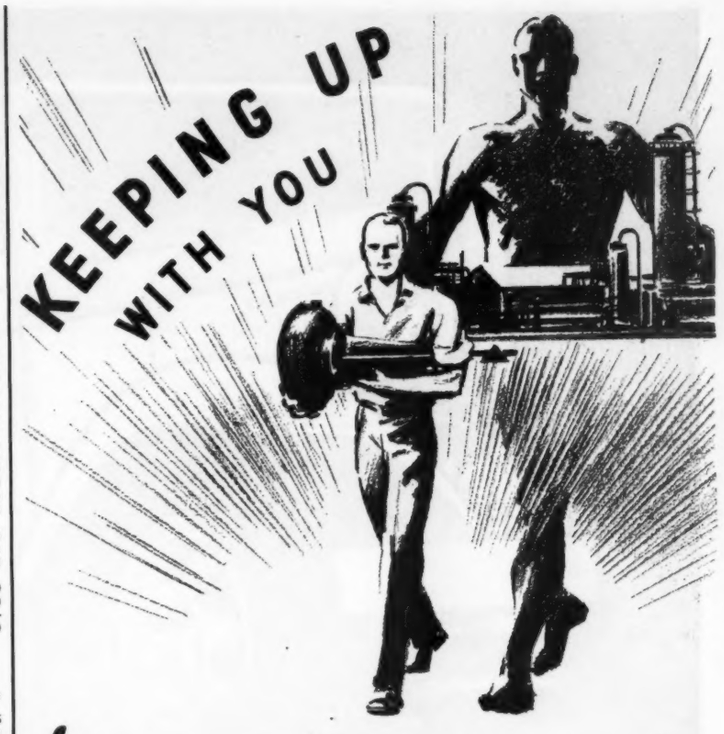
About 4 feet in front of the screen is located a drum on which are marked, so that separate positions are available, the 48 states, the District of Columbia and the Domnion of Canada. From the center of the drum a controller handle projects to the positions of the states around the circumference. The spectator merely moves the controller to the state in which he is interested and the outline of that state is projected upon the rear of the screen by remote control. Across the outline of the state projected on the screen are given the brands of Ethyl Gasoline sold within the state. Thus the spectator is advised where he can purchase the product and the oil company which will be glad to sell it to him.

Court Findings Show Low Average Gallonage

(Continued from Page 36)

and the Sinclair Refining Co. The gross revenues per station of these four companies excepting the Pure Oil Co., for which figures are not available, are in each case substantially less per station than the Standard company, i.e., $2,512 for the Gulf Refining Co., $3,177 for the Ashland Refining Co., and $3,909 for the Sinclair Refining Co. For the year 1932, the total operating loss of the Gulf company was $360,876. Apparently this applied only to service stations. With the Pure company there was a net loss per station in each year from 1931 to 1933; with the Ashland Refining Co. there was similar result in 1932 and six months of 1933. For the Sinclair company there was net loss in each of the years, 1931 to 1933."

The court also found: "The net operating figures of the Standard Oil Co. of New Jersey contained in the stipulation were obtained from the records of the company by competent accountants who, if called to testify, would say that the figures and the computation based thereon had been properly determined in accordance with sound accounting principles."



keeps us young . . .

A dozen years ago, refinery pressures and specific gravities were lower . . . and liquid level controllers designed for water service were satisfactory. Processes began to advance and Mason-Neilan saw the need for improved level control and developed a frictionless ball bearing controller solely for oil service.

When liquids grew even lighter and corrosive conditions more severe, Mason-Neilan was ready with a highly sensitive pilot operated type . . . with controllers having all internal parts made of 18-8 stainless steel at regular prices . . . with instrument type level controllers for specific interface applications.

Mason-Neilan now manufactures nine distinct types of liquid level controllers, each one best suited to some particular gasoline plant or refinery requirement . . . developed *in and for* the Oil Industry by oil trained engineers. Your nearest Mason-Neilan Engineer will be glad to help you obtain exact control of liquid level, pressure, temperature, and rate-of-flow by recommending the correct type of Mason-Neilan Control Equipment for every service.

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BALTIMORE, Whitaker Bldg. . . . . Morton Mcl, Dukehart & Co.
CHICAGO, 435 North Michigan Ave. . . . . Gordon Thomason, Mgr.
HOUSTON, 1400 Conti St. . . . . Maintenance Engineering Corp.
LOS ANGELES, 2446 Enterprise St. . . . . Tunnell & Co.
MONTREAL, CANADA, 620 Cathcart St. . . . . Maurice Peiler, Mgr.
NEW YORK, 19 Rector St. . . . . Rudolph B. Werey, Mgr.
PHILADELPHIA, 930 North Front St. . . . . Baeuerle & Morris, Inc.
PITTSBURGH, Clark Bldg. . . . . Bruce Irwin, Mgr.
ST. LOUIS, 2726 Locust Blvd. . . . . O'Brien Equipment Co.
SYRACUSE, N. Y., 640 Gurney Bldg. . . . . O'Brien Steam Specialty Co.
TULSA, 409 East Archer St. . . . . Moorlane Co.

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1030

*THIS PLATE

is your Key to low cost truck operation

$595 1½-2½ TON CHASSIS
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DUAL WHEELS EXTRA

✱ The Ability Rating Plate that you will find in plain view on every Reo Truck and Speedwagon bears these vital facts: (1) Gross load capacity of the truck. (2) Percent of grade it will climb in high gear, fully loaded. (3) Safe loaded speed on level roads.

That is what Reo means by ABILITY RATING—rating the vehicle specifically and honestly according to its true ability to deliver.

Reo does not merely offer an idle claim or hopeful estimate of what you may expect—but a definite advance picture of performance under any given conditions.

The reason why Reo can take this unprecedented stand is found in the Reo factory, in the Reo traditions of quality—in the knowledge that Reo trucks are built and balanced for *extra hard service and extra long life!* Otherwise such a specific forecast of RESULTS would not be possible.

With these results known in advance—with performance literally *pre-determined*—operators can plan their schedules and gauge their costs with a degree of precision unheard of before Reo developed ABILITY RATING.

Why buy a truck without first learning the details of this exclusive plan? Why not write Reo—or ask your Reo dealer—just how Reo has ended blindfolded buying and put truck selection and operation on a SOUND and SCIENTIFIC basis?

Reo Speedwagons and Trucks range from ¾ to 4-6 tons. New low prices—$530 and up. 32 wheelbases, all with Reo Gold Crown Engines. Tractor-Trailer units with correct load distribution and maximum pay load capacity. All prices chassis f. o. b. Lansing, plus tax.

WRITE Reo today for the "Truck Superiority Book." This book will serve as an excellent guide in the correct selection of your next truck. It supplies accurate and invaluable data with which you may compare all trucks in the low price range.

The Reo Truck Performance Gauge gives the exact answer as to the truck best suited for your job. Before buying a truck, ask a Reo salesman to use this Gauge in determining your particular requirements.

THE QUALITY TRUCK IN THE LOW PRICE FIELD

REO MOTOR CAR COMPANY LANSING MICHIGAN

Problems of Petroleum Equipment Suppliers

(Continued from Page 38)

ceeded to organize the American Petroleum Equipment Suppliers Association and to formulate a code of fair competition for the petroleum industry and trade for we needed help and needed it quickly.

Incidentally, our business had slumped just 76⅔ per cent below our 1929 figure, but our expenses had not slumped proportionately. So, you will readily agree with us that quick action had to be taken.

We have approximately 750 members of our industry and trade who have filed their prices with the code authority, most of whom are complying with all of the provisions of the code. On the other hand, there are quite a number of firms not yet complying.

During the period of operation under our code, we have had just one complaint filed by a user of our products. This complaint was made by a buyer of pumping equipment. I believe when the buyer of this particular kind of equipment is advised that the steel entering into its manufacture costs $22 per ton more than it did in 1933 and that other items of manufacture have advanced proportionately, he will see that the new price will not produce a profit. Proration has probably had something to do with this particular complaint. Not so long ago, every operator was anxious to produce his wells at full capacity and little thought was given to the conservation of nature's own producing force—gas.

It was common practice to buy all the pumping equipment needed upon completion of wells for it was a certainty that only a few days or weeks would elapse before it would be needed. This kept a free flow of pumping equipment through our manufacturing plants and distributing warehouse to you.

The picture has changed; East Texas is a fair example. More than 13,000 wells have been drilled in that area and less than 10 per cent have been put on the beam, and this is true in many of the other oil fields. This has reduced the sale of pumping equipment to practically nothing as compared with former years.

Some day, you will need all of our pumping equipment, manufacturing and distributing facilities, because there will be a mad rush when the time comes to put your wells on the beam. In the meantime, we must hold our organizations together and our fixed charges will, of necessity, remain fixed. So, if, due to low production and increased costs for labor and material, the price at this time seems somewhat out of line with what it was a short time ago, please do not be too critical, for we must await the time with patience when you will make known your need for these products. Meanwhile, we must eke out an existence and we will be compelled to charge more than formerly.

In the past, you have changed your drilling, casing and production programs overnight, so to speak, and have thereby rendered obsolete much of the stocks of manufacturers and jobbers who had piled up inventory in order to give you the quick service you require.

The sudden changes in plans above referred to have made us more cautious than ever before, and now many in our industry must now manufacture in smaller quantities and on engineering specifications rather than on a production basis, if they are to avoid obsolescence due to being temporarily out of step with your progress. This, of course, increases our costs.

Cannot Return to Old Conditions

But, getting back to the new deal, we are firm believers in codes of fair competition. The very fact that the petroleum industry is now working under a code of fair practice has enabled it to expand its activities and we, in turn, are reaping the benefits of such expansion.

I believe I can safely say that all of us are earnest and sincere backers of the NRA. Deep down in our hearts none of us would care to return to those conditions of economic chaos forced on us by insane competitive conditions such as existed prior to the new deal.

And yet there are many abroad in the land today who find this program too rich for their blood. There are those who say that competition has been eliminated, as if fair competition were not competition. There are those to whom the word competition is synomonous with price chiselling and to whom competition on the basis of quality, durability, design and field service has no meaning. To them, open price reporting is price fixing, although open prices have been the salvation of the best merchandisers in other lines for many years. There are others who say that the emergency is over, as if that should, even if true, be a signal for a return to unfair practices.

Code or Chaos

I believe that all sound-thinking members of the industry will agree with me that should the National Industrial Recovery Act be repealed tomorrow, economic chaos would again prevail.

The petroleum equipment industry and trade is operating under what is known as a vertical code. This differs from a horizontal code in that it covers all, with few exceptions, of the equipment and supplies used by the petroleum industry rather than just a specific product.

The buyer of petroleum equipment and supplies has, today, the choice of two lines of action: He can buy from those who are complying with our code or he can buy from those who are not complying with our code.

Codes are, by nature and purpose, such that they cannot be properly effectuated without co-operation on the part of buyers and sellers alike.

Probably, a price differential will exist between the code complier and the nonecode complier.

Having had 11 years experience as an oil company buyer, no one realizes better than I do that in asking you to forego this differential, I am asking you to act contrary to human nature; but I believe that anyone will admit that in all fairness and equity those who profit under the protection given them by their code should co-operate with a kindred industry serving them under another code.

In view of this reciprocal relationship between the petroleum industry and the American Petroleum Equipment Suppliers Association, I call on you for an unusual brand of teamwork and co-operation, for I sincerely believe that the best interests of both our industries can be served by a fair, rational, and co-operative attitude toward the problems of each other at this particular time.

DEATH OF H. J. PARKER

PITTSBURGH, Pa., June 9.—Harry J. Parker, 76, died suddenly at his home here. He was a pioneer oil operator and was born at Parkers Landing, which was named for his father.

Mr. Parker was president of the Lewis Production Co. of Tulsa, and of the E. A. Brown Co. of this city, and was en route home from a country club, driving his own car, when he was stricken, but managed to guide the car towards a telegraph post. He was removed to a hospital, but died soon after. He is survived by a son, George Parker of Tulsa and one daughter, Mrs. R. C. Sharp, also of Tulsa. Mrs. Sharp and her husband arrived here several hours after the death of Mr. Parker.

JACK BERGERON DEAD

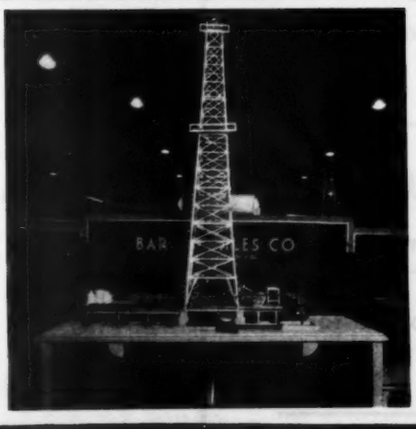
HOUSTON, Tex., June 9.—Jack Bergeron, 47, assistant superintendent of the American Refinery Co., of Cuba, fell dead in a Baytown, Tex., cafe.

BAROID

HIGH pressures are dangerous unless controlled!

BAROID, properly used, enables the operator to control practically any high gas or water pressure encountered in drilling.

PLAY SAFE by using BAROID .. the PROVEN weighting material for drilling mud.



Complete, exact scale 10-foot model of Rotary Drilling Rig in full operation, exhibited at the Houston and Tulsa Oil Shows

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AQUAGEL: Trouble-Proof Colloidal Drilling Mud

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THE
PETROLEUM BUILDING
OF CHICAGO
INVITES YOU

On Behalf of the Following New Tenants to Inspect Their Offices In Chicago's

New Oil Center

AMERICAN-MEXICAN PETROLEUM CORPORATION

All Grades of Asphalts and Oils for Paving and Highway Construction

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Wholesale Dealers in Petroleum Products of All Kinds

Specialists in Technical Naphtha for Industrial Uses

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Summary of California Oil Field Operations for April, 1934

Twenty-nine wells were completed during the month with an initial daily production of 49,516 bbls., compared with 25 wells completed during March with an initial production of 30,976 bbls.

Starting this month, stocks of gasoline and unblended natural gasoline will be segregated. Blended natural gasoline is included with gasoline in Item No. 4. Only gasoline located at refineries, bulk terminals, and in transit is reported; stocks held at distributing and service stations are not included.

CRUDE PETROLEUM PRODUCTION

(Figures of Production and Stocks are in barrels of 42 gallons)

	Barrels per month	Daily average April, 1934	Daily average March, 1934	Daily average April, 1933
Group No. 1:				
Belridge—North	199,779	6,659	7,246	(*)
Belridge—South	62,143	2,071	2,061	(*)
Coalinga	487,706	16,257	16,639	10,472
Elk Hills	327,252	10,908	11,056	12,873
Fruitvale	111,567	3,719	3,727	4,906
Kern River	278,831	9,294	9,443	8,769
Kettleman Middle Dome	6,640	221	269	304
Kettleman North Dome	1,676,564	55,852	54,618	59,587
Lost Hills	107,831	3,594	3,402	*9,078
McKittrick	97,216	3,241	3,170	1,693
Midway-Sunset	1,628,941	54,268	53,990	47,039
Mountain View	175,924	5,864	3,988	.....
Mount Poso	262,196	8,740	8,187	7,981
Round Mountain	151,318	5,044	5,996	2,992
Wheeler Ridge	12,939	431	437	473
Group No. 2:				
Capitan	10,228	341	341	16
Elwood	351,934	11,731	12,254	12,760
Rincon	51,022	1,701	1,544	2,018
San Miguelito	20,938	698	927	1,077
Santa Barbara	16,574	553	511	681
Santa Maria	145,247	4,842	4,673	2,762
Summerland	1,964	66	67	85
Ventura Avenue	821,829	27,394	31,848	22,540
Ventura-Newhall	109,930	3,664	3,392	3,225
Watsonville	1,800	60	60	58
Group No. 3:				
Brea-Olinda (Fullerton)	280,031	9,334	9,120	7,712
Coyote—East	72,889	2,430	1,899 }	
Coyote—West	263,892	8,796	8,517 }	†11,333
Dominguez	614,867	20,496	17,834	18,275
Huntington Beach	1,190,477	39,683	40,120	27,815
Inglewood	275,394	9,180	9,301	12,827
Lawndale	4,257	142	174	255
Long Beach	2,008,036	66,934	62,262	73,709
Los Angeles-Salt Lake	22,669	756	854	881
Montebello	152,451	5,082	5,114	5,337
Playa Del Rey	293,125	9,771	9,014	12,102
Potrero	14,041	468	418	429
Richfield	237,972	7,932	7,216	6,501
Rosecrans	81,523	2,721	2,479	3,111
Santa Fe Springs	1,287,763	42,925	41,906	53,931
Seal Beach	331,985	11,036	10,939	12,453
Torrance	193,329	6,444	6,390	6,247
Whittier	32,480	1,083	1,128	1,124
Total April	14,472,785	482,426	474,531	475,431
Total March	14,710,467	474,531	.....	.....
Increase	‡237,682	7,895	.....	.....

*Lost Hills figure includes North and South Belridge.
†East and West Coyote were previously combined as Coyote.
‡Decrease.

OIL FIELD DEVELOPMENT

	New rigs up	Active drilling	Producers completed	Daily initial output	Active producing	Abandoned wells: Drillers	Abandoned wells: Producers
Group No. 1:							
Belridge—North	..	3	...	.....	21	..	..
Belridge—South	..	1	...	.....	104	..	..
Coalinga	..	...	...	.....	856	..	..
Elk Hills	..	...	...	.....	211	..	..
Fruitvale	1	3	...	.....	60	1	1
Kern River	..	...	...	.....	1,249	..	..
Kettleman Middle Dome	..	1	...	.....	1	..	..
Kettleman North Dome	4	24	4	32,191	54	..	..
Lost Hills	..	...	...	.....	300	..	..
McKittrick	1	2	...	.....	198	..	..
Midway-Sunset	3	7	...	.....	2,356	1	1
Mountain View	5	17	2	1,938	12	1	..
Mount Poso	6	6	3	684	127	..	..
Round Mountain	1	2	...	.....	40	..	..
Wheeler Ridge	..	...	...	.....	34	..	..
Group No. 2:							
Capitan	..	...	...	.....	6	..	..
Elwood	1	5	1	290	52	..	..
Rincon	..	...	...	.....	33	..	..
San Miguelito	1	...	...	.....	3	..	..
Santa Barbara	1	1	...	.....	16	..	..
Santa Maria	1	2	...	.....	174	1	..
Summerland	..	...	...	.....	22	..	..
Ventura Avenue	1	9	2	3,812	175	..	..
Ventura-Newhall	2	8	...	.....	7	4	..
Watsonville	..	...	...	.....	7	..	..
Group No. 3:							
Brea Olinda (Fullerton)	..	...	...	.....	343	..	..
Coyote—East	..	1	...	.....	66	..	..
Coyote—West	1	4	2	636	29	..	..
Dominguez	2	9	3	3,272	65	..	..
Huntington Beach	..	4	2	2,808	449	2	1
Inglewood	3	3	2	2,400	194	1	..
Lawndale	..	...	...	.....	7	..	..
Long Beach	4	29	7	953	1,063	..	..
Los Angeles—Salt Lake	..	...	...	.....	160	..	..
Montebello	..	11	...	.....	165	..	..
Newport	..	...	...	.....	.....	..	..
Playa Del Rey	..	1	1	530	168	1	2
Potrero	..	...	...	.....	9	1	1
Richfield	..	1	...	.....	222	..	1
Rosecrans	..	...	...	.....	63	..	..
Santa Fe Springs	2	3	...	.....	538	..	..
Seal Beach	..	1	...	.....	118	..	..
Torrance	..	...	...	.....	449	..	3
Whittier	..	...	...	.....	152	..	..
Miscellaneous drilling	1	27	...	.....	.....	12	..
Group No. 4:							
Buttonwillow gas field	..	...	...	.....	.....	..	..
Dudley Ridge gas field	1	2	...	.....	.....	..	..
Goleta gas field	..	...	...	.....	.....	..	..
Total April	42	187	29	49,516	10,331	25	10
Total March	40	183	25	30,976	10,780	9	16
Increase (*Decrease)	2	4	4	18,540	51	16	*6
Average for year 1933	30	124	21	22,842	9,199	14	18
Average for year 1932	18	108	15	13,069	8,928	16	14
Average for year 1931	22	207	21	30,370	8,911	20	15

Angelita Test, San Patricio County, Is Watched; Plan Drilling Campaign in North Pettus Field

SAN ANTONIO, Tex., June 11.—Circle W Oil Co.'s No. 1 Welder, about 1,500 feet northwest of the discovery well in the Angelita Field of San Patricio County, held much of the interest of Southwest Texas operators during the past week. Circle W's No. 1 Welder, second test for the field, made both oil and salt water during the past week after the hole was bottomed at 5,378 feet. A Schlumberger test was run to 5,367 feet which showed salt water from 3,560-62 feet and it is the general belief the salt water is coming from this sand and not the lower sand which showed good saturation. Another 2-foot core was taken from 5,378-80 feet and showed considerable saturation with no water. At last report operators were coring and will carry the well to 6,000 feet and if nothing of commercial value is found it will then be plugged back and whipstocked to the present showings. The discovery well for the area, Atkins & O'Neil and Continental Oil Co.'s No. 1 Welder, completed about a month ago, came in flowing at the rate of 175 bbls. per day at 5,382 feet.

Atkins & O'Neil and Continental's No. 2 Welder, two locations south of the Circle W well, was moving in rig. It is 466 feet from the south and east lines of lease in Block 2.

About 3 miles southwest of Odom in San Patricio County, Bunte and others' No. 1 C. C. Smith in the A. Armstrong Survey, was coring at 5,551 feet with nothing of importance yet encountered.

In the newly discovered Sinton area, Plymouth Oil Co.'s No. 2-A Welder, 1,320 feet due east of No. 1-A, was drilling at 1,220 feet. Plymouth's No. 1-B Welder, 3,500 feet northwest of No. 1-A, was rigging up and preparing to spud.

North Pettus Field

The North Pettus Field which takes in parts of Bee, Karnes and Goliad Counties, is scheduled for an active drilling campaign. There are nine wells in the area either drilling or preparing to start operations. Houston Oil Co.'s No. 1-B Neihaus, south of the North Pettus Field, has been completed for 477 bbls. daily through one-half and three-eighths inch chokes. It had a pressure of 350 pounds on tubing and 500 pounds on casing. Houston Oil Co.'s No. 1 Neihaus, west of Magnolia's No. 1 Scarborough, set 10-inch surface casing at 425 feet. Magnolia Petroleum Co.'s No. 2 Scarborough, an east offset to Houston's No. 1-B Neihaus, was spudding. Houston's No. 1-A Neihaus, a north offset to No. 1, was clearing location. Magnolia Petroleum Co.'s No. 3 Porter, offsetting Weinert's No. 1 Smith producer, was spudding. Sun Oil Co.'s No. 1 Scarborough, southwest of Weinert's No. 1 Smith, was spudding. H. H. Weinert's No. 2 Grady Smith, northeast of No. 1, was rigging up. Jim Kendricks and J. W. O'Byrne and others' No. 1 Runge State Bank, about a mile northeast of Weinert's producer, was rigging up and preparing to spud. United Production Co.'s No. 45 Ray, was drilling at 4,160 feet.

Caeser Area

In the Caeser area of Bee County, Houston Oil Co.'s No. 1 Miller, west of Caeser's No. 1 Pullin gasser, was drilling at 3,175 feet and it was reported the well would be carried to 7,000 feet if necessary. It showed good for a gas well in the Pettus sand, but had salt water sand from 3,103-05 feet. Caeser Oil Co.'s No. 2 R. E. Miller was drilling at 3,200 feet. Northeast of the discovery, R. A. David's No. 1 Baptist Church, in the F. Lewis Survey, was moving in material.

About 1½ miles from the Tuleta Field, Dirks Brothers' No. 1 Skinner & Harrison, in the Ragley Subdivision of the Chittim-Miller ranch, was drilling at 3,973 feet and reported running about 160 feet high.

Magnolia Petroleum Co. is reported to have paid $7,300 for a renewal of its option on the Ward ranch. The minimum amount of acreage if selected calls for 5,000 acres and the maximum amount 10,000 acres. The $7,300 is to apply on the purchase if the acreage is taken.

Guerra Pool

In the Guerra Pool in the Los Cuevitas Survey of northwestern Starr County, Sun Oil Co. has completed gathering lines to the nine producers and is erecting a 118,000-bbl. storage tank for a 30-day test of the wells. The test will be made through permission obtained from Administrator Ickes. Sun Oil Co.'s No. 6-C Guerra and others, about a mile south of production, topped sand at 2,202 feet and bottomed hole at 2,212 feet. Late in the week it was straightening hole before bringing the well in. Sun's No. 1-E Guerra & Sons, north of production and across the line in Jim Hogg County, was drilling at 2,155 feet.

McDonald's No. 1 E. A. Peffley, in Section 933, was waiting orders as to whether the well will be carried deeper. It topped sand at 2,464 feet and drilled into salt water at 2,500 feet.

Duval County

In Duval County and about 6 miles northeast of the Government Wells Field and northeast of the Eagle Hill Pool, Cloyes' No. 1 Hagist, in Section 265, was creating considerable interest after showing favorably for a good producer in sand topped at 2,146 feet. The top 8 feet was reported good sand and the remaining 14 feet is said to be sandy shale and lignite, and sticky shale. At last report it was waiting on cement with a total depth of 2,168 feet.

Government Wells

The Government Wells Field marked up 11 completions during the week. Magnolia Petroleum Co.'s No. 3 Duval County Ranch bottomed hole at 2,227 feet and came in flowing at the rate of 6 bbls. per hour. Reed & McKay's No. 10 State-Lundell made 90 bbls. per hour at 2,234 feet. Bridewell Oil Co.'s No. 4 Hahl drilled to 2,337 feet and was completed for a 150-bbl. pumper. Central Producers' No. 2 Luptak made 20 bbls. per hour at 2,291 feet. Humble Oil & Refining Co.'s No. 24 Paul White bottomed hole at 2,219 feet and made 15 bbls. per hour. Magnolia Petroleum Co.'s No. 28 Duval County Ranch was completed for a 50-bbl. pumper at 2,344 feet. Magnolia's No. 4 Hahl-Riley was abandoned as dry, total depth 2,393 feet. Smith Storey's No. 7 Lundell made 75 bbls. per day at 2,310 feet. J. D. Clair Smith's No. 1 W. P. Norton bottomed hole at 2,377 feet and was completed for 500 bbls. daily. Sun Oil Co.'s No. 63 Weiderkehr was completed for 4 bbls. per hour at 2,242 feet. Texas Co.'s No. 10 Duval County Ranch fee was completed for a 100-bbl. pumper at 2,322 feet.

Frio County

In Frio County and about 4 miles southwest of Pearsall, Amerada Petroleum Corp.'s No. 2 Halff & Oppenheimer was drilling 4,952 feet. Magnolia Petroleum Co. is reported to have recently taken about 800 acres east of the town of Pearsall and northeast of Amerada's block. Humble Oil & Refining Co. is also reported taking acreage in the area.

Hidalgo County

In the southwest part of Hidalgo County, Davis & Harrison's No. 1 Lula George was drilling 2,705 feet. Union Sulphur Co.'s No. 1 American Rio Grande Land & Irrigation Co., about 7½ miles north of Mercedes, in the southeastern part of the county, was drilling 5,790 feet. Union Sulphur Co. is reported to have recently taken around 10,000 acres about 8 miles north of Edinburg.

Webb County

East of the city of Bruni and in Webb County, United Production Co.'s No. 1 Bruni, deep sand discovery in the area, will not flow and operators were preparing to put the well on gas lift. It had 2,000 feet of oil in the hole. This newly discovered deep sand was encountered from 3,410-17 feet and tested eight joints of 42 gravity oil and six joints of mud.

Guadalupe County

In Guadalupe County H. H. Weinert is reported to have received 700 acres from Humble Oil & Refining Co. near Belmont and on the Guadalupe and Gonzales County lines for the drilling of a well.

Kerr County

In Kerr County, Edminston & Walker's No. 1 Whitworth, in Section 1,439 in the southern part of the county, was drilling 160 feet. Jeff Love and Eastland Oil Co.'s No. 5-E Jeff Love, was drilling below 800 feet.

Evans and associates of Brownwood are reported to have taken a 17,000-acre block northeast of Kerrville for a test to be started within 60 days. It has been reported the test may be carried to the Ordovician.

Uvalde County

In Uvalde County, Humble Oil & Refining Co.'s No. 1 R. L. Anderson, about 3 miles northeast of Uvalde, was drilling 2,100 feet.

McMullen County

Lefevre & Spice's No. 2 Hagist, west of No. 1 well, in Section 17, McMullen County, drilled base of the Government Wells sand at 1,918 feet and at last report was drilling ahead. It topped the Government Wells sand at 1,862 feet and on a drill stem test showed 34 fourbles of salt water in 30 minutes. About 4 miles northeast of Tilden and in the M. Castillo Survey No. 7, Helvetie Oil Co. has spudded No. 1 W. E. Teal.

Nueces County

Near Robstown, in Nueces County, Diadem Oil Co.'s No. 1 J. C. Mayo, in Section 23, was drilling 5,275 feet and reported running high. Benedum & Trees' No. 1 Bickman, in the J. Farras Survey, Block 9, was drilling 5,275 feet. North of the old Aqua Dulce Field in Nuces County, Camp and others' No. 2 King was setting casing with total depth of 6,021 feet. A Schlumberger test showed the well to have three promising sands from 4,030 feet, 5,439 feet and 5,531 feet. Texon Royalty Co.'s No. 1 Simmons & Perry, about 2 miles east of the Agua Dulce Field, has been abandoned as dry with total depth of 6,510 feet.

About 3 miles north of Robstown, Darby Petroleum Co. is reported to have taken acreage in the Casa and Blanca Survey, Atlantic Oil & Producing Co. is reported to have taken acreage in the M. L. Herrera and the Farias Surveys.

Caldwell County

Between the town of Dale and the old Dale Field in Caldwell County, Kenneth Aid and associates are reported to have taken a block for an Edwards lime test.

Bandera County

About 8 miles southwest of Medina in Bandera County, Peerless Oil & Gas Co.'s No. 1 Garrison was rigging up and preparing to spud. It is 1,500 feet from north and 2,700 feet from the east lines of the Garrison Survey No. 506. It is reported to be a 6,000-foot test.

Southern Seaboard Oil Co. is reported to have taken about 5,000 acres centering around the A. Keeran, J. Chenowith, J. Fisher, W. McWilliams, J. H. Harrold and J. P. Cole Surveys. Yount Lee Oil Co. and Humble Oil & Refining Co. are both reported to have taken protection in the area.

De Witt County

In DeWitt County, Keystone Royalties' No. 1 L. T. Burns, in the I. G. Belcher Survey, was drilling below 425 feet.

Aransas County

In Aransas County, contract has been awarded by the Atlantic Pipe Line Co. to Scrivner and Richardson for the trestle to be used in elevating the company's pipe lines from Aransas Pass to Harbor Island, a distance of approximately 6 miles.

Wildcat Operations in Southwest Texas

Week Ending June 9

BANDERA COUNTY

Company, well, farm name, section and block—	Remarks:
Parkford et al's No. 1 Mrs. R. L. Duke, G.H.&S.A. Sur., Sec. 7	Material.
Peerless O. & G. Co.'s No. 1 Garrison Sur. No. 506, 1,500 ft. from N and 2,700 ft. from E lines of Sur. (8 mi. SW of Medina)	Rigging up.

BASTROP COUNTY

Chas. E. Anderson's (Ca-Tex O. & G. Dev. Co.) No. 1 Pendergrass, 1,343 ft. from NE line, 310 ft. from SE line of 136-ac. tract in Henry Warnell Sur.	S.D. 1,815 ft.; treating with acid.
Marts & Beavens' No. 1 Davenport, 2,600 ft. NW line, 3,550 ft. SW line in Thos. Garratson Sur., 1 mile SE of Elgin	Drlg. 150 ft.
Marts & Beavens' No. 3 Reyes, 450 ft. S line, 150 ft. NW line of survey	T.D. 1,723 ft.; comp. 15 bbls. dly. pumping.
McGahan & Vogel's No. 1 W. P. Watts, 150 ft. SE line, 750 ft. SW line of 75-ac. tract in J. W. Burton Sur. N of Yoast Field	Rigging up.
Ogden & Reed's No. 1 Little, 200 ft. from NE line, 150 ft. NW line, Maximilian Sur.	T.D. 2,338 ft. in chalk; W.O.C.
N. Pennett's No. 1 Carroll, 330 ft. NW line, 990 ft. SW line of 40-ac. tract in Mays Sur.	Location.
Three Oil Co.'s No. 1 M. Ingram, H. S. Morgan Sur.	610 ft.; S.D.

BEE COUNTY

Caeser Oil Co.'s No. 1 R. E. Miller, F. Lewis Sur.	S.D. 60 ft.
Caeser Oil Co.'s No. 2 R. E. Miller, 350 ft. from W line, 150 ft. from S line of 100-acre tract in F. Lewis Sur.	Drlg. 3,200 ft.
Caeser Oil Co.'s No. 1 Pulling Est., F. Lewis Sur.	Derrick.
Dash Prod. Co.'s No. 2 Buhman, 885 ft. from SW line and 2,113 ft. from SE line of Hodge Sur.	Rigging up.

(Continued on Page 62)

Ector County Wildcat Is Most Closely Watched; Good Well in Steele Area, Fisher County

By L. E. BREDBERG
Fort Worth Bureau, The Oil and Gas Journal

FORT WORTH, Tex., June 11.—C. J. Davidson's No. 1 Cummins, in northwestern Ector County, is now the most closely watched wildcat drilling in the West Texas district, due to an increase in gas at 4,202 feet estimated at 5,000,000 feet. It has now reached a critical depth and the final determination is due within a few days. It is credited with running high structurally and its chances of opening another pool are very favorable. Location is in Section 10, Block 45, Township 1n, T.&P. Survey. Late in the week it had reached a total depth of 4,210 feet.

In the same county, but in the Cowden area, Landreth Production Co.'s No. 1-A T. P. Land Trust, Section 3, Block 43, Township 1s, T.&P. Survey, which extended the area three-quarters of a mile southwest last week, had an increase in production from 4,193-4,204 feet and on a 24-hour gauge flowed 600 bbls. Another increase was registered at 4,255 feet and it is drilling at 4,275 feet. It is to be carried a few feet deeper where it will be shot, and its completion is expected to make it the largest producer in that area. The same company made location for No. 1-C T. P. Land Trust during the week. It is in Section 11, Block 43, Township 1s, T.&P. Survey. It will be an interesting test as it is about one-half mile south of the above test.

Andrews County

Fuhrman Petroleum Corp.'s No. 1-B Bonner, in the Ford area, Andrews County, was shot with 430 quarts from 4,170-4,481 feet and flowed 400 bbls. per day, making it the best producer in the field. Only two other wells have been drilled in the immediate area, but other tests will no doubt be started since the shooting of this test has resulted in such a nice producer. It is bottomed at 4,493 feet and will no doubt make a better well after the hole has been thoroughly cleaned. It is in Section 25, Block A-43, P.S.L. Survey.

Five miles northeast of the Bonner production, Honolulu and Llano Oil Co.'s have made an interesting location in the center of the SW cor. Section 7, Block A-44, P.S.L. Survey, which is to be spudded by the first. It is on the J. E. Parker ranch.

In the Deep Rock area, same county, Humble Oil & Refining Co.'s No. 1 Kuykendall was shot the second time from 4,325 to 4,511 feet and swabbed 23 bbls. of oil and 2 gallons of sulphur water hourly from a total depth of 4,511 feet. It is in Section 24, Block A-46, P.S.L. Survey.

Fifteen miles northeast of the Deep Rock area, Andrews County, Humble Oil & Refining Co.'s No. 1 Means wildcat, was drilling below 3,612 feet. The operators are using heavy rotary mud to hold down 10,500.000 feet of gas which was struck at 2,957 feet.

Schleicher County

In Schleicher County, John M. Cooper's No. 1 Bert Page, an Ordovician wildcat, began spraying a small amount of 48 gravity oil following the striking of 1,000,000 feet of gas at 5,404 feet where it is shut down awaiting consummation of some acreage deals around the test. It is in the NW Section 40, Block L, G.H.&S.A. Survey, 9½ miles southeast of Eldorado.

Culberson County

In the northwest part of Culberson County, Anderson-Prichard Oil Corp. began moving in material for a scheduled 5,000-foot test to be drilled on the W. M. Borders ranch, on a block of more than 80,000 acres. Location is to be in Section 34, Block 69, P.S.L. Survey. Dr. Emil Ott of San Angelo worked the geology on the large block, and several undivided interests have been sold. Magnolia Petroleum Co. is reported to have purchased a quarter interest. The test will be drilled by Olsen Drilling Co. of Tulsa, and it is reported the test will be started by July 1.

Crane County Wildcat

Wahlenmaier Petroleum Co.'s No. 1 W. P. Edwards, a wildcat in the north central part of Crane County in Section 12, Block B-23, P.S.L. Survey, bailed 60 bbls. of oil in 10 hours, lowering the oil only 250 feet; it then filled to its former level in one hour and a half. Sulphur water was logged from 3,715-20 feet, and it was plugged back to 3,540 feet. Gulf Production Co. has made a semiwildcat location about 1½ miles south. It is on the E. N. Snodgrass fee lands in Section 1, Block B-25, P.S.L. Survey.

Ward County

In southern Ward County, Westex Oil Co.'s No. 1 Cynthia Monroe, about 2 miles west and 2 miles south of the Bennett production and in Section 2, J. V. Borders Survey, tested 600 feet of oil in 15 minutes on a drill stem test. It is bottomed at 2,509 feet.

Pecos County

In Pecos County, Mack T. Anderson's No. 1 T. N. McKenzie, 2½ miles south of the Taylor-Link Pool, pumped 15 bbls. of oil in 24 hours and is drilling below 1,324 feet showing gas from 1,346-50 feet.

Penn Pool

Shell Petroleum Corp.'s No. 2 Eli Jones, in the Penn Pool, Ector County, flowed 225 bbls. of oil in 13 hours by heads at a total depth of 3,689 feet and is scheduled to be treated with acid. It is in Section 6, Block 44, Township 3s, T.&P. Survey.

COMPLETIONS IN WEST TEXAS

Ector County

Stanolind Oil & Gas Co.'s No. 3 E. F. Cowden, shot 105 quarts 3,939-77 feet, initial production 317 bbls. per day flowing, total depth 4,172 feet; No. 5 J. M. Cowden, top pay 4,160-44 feet, shot 350 quarts from 4,116-4,230 feet, total depth 4,400 feet, plugged back to 4,333 feet, initial production 970 bbls. on proration gauge.

Fisher County

Roeser and Pendleton's No. 2 J. Steele, pay 3,191-95 feet, initial production 20 bbls. of oil and 250 bbls. of salt water, total depth 3,196 feet. Sinclair Prairie Oil Co.'s No. 3 Frank Steele, top pay 3,195-3,212 feet, initial production 57 bbls. per hour, total depth 3,215 feet, treated with acid. Southern Oil Corp.'s No. 1 D. E. King, total depth 3,128 feet, plugged back to 3,125 feet, initial production 35 bbls. per hour swabbing, lime 3,092-3,105 feet, treated with acid.

Jones County

Condor Petroleum Corp.'s No. 2 H. Sayles, show of oil 1,899-1,908 feet, flowed 60 bbls. per hour, total depth 1,908 feet.

Upton County

Texas Pacific Coal & Oil Co. and others' No. 3-B Sherk, top pay 2,408-83 feet, initial production 205 bbls. pumping, total depth 2,483 feet.

Ward County

Gulf Production Co.'s No. 28 Hutchins, top pay 2,563-2,760 feet, initial production 686 bbls., total depth 2,700 feet; No. 45 O'Brien, top pay 2,565-2,754 feet, initial production 442 bbls., total depth 2,754 feet. Jack Lydecker and others' No. 1 Shell-Sloan, top pay 2,602-3,050 feet, initial production 612 bbls., total depth 3,053 feet. Tex-Mex Petroleum Corp.'s No. 2 California-Archenhold, top pay 2,457-3,045 feet, initial production 425 bbls., total depth 3,045 feet.

Winkler County

Sid Richardson's No. 3 Skelly-Scarborough, top pay 2,895-3,043 feet, initial production 184 bbls., total depth 3,043 feet.

COMPLETIONS IN NORTH TEXAS

Archer County

Alcorn and Atlantic Oil Producing Co.'s No. 1 Justice, lime 1,085-93 feet, initial production 175 bbls., total depth 1,093 feet. Anarene Oil Co.'s No. 7 Justice, lime 1,081-92 feet, initial production 25 bbls., total depth 1,092 feet, treated with acid. Bonner Oil Co.'s No. 10-E Abercrombie, lime 1,133-44 feet, initial production 75 bbls., total depth 1,144 feet, treated with acid. Burns and Long's No. 11-R Wilson, oil sand 1,446-56 feet, initial production 300 bbls., total depth 1,456 feet. Continental Oil Co.'s No. 6-C Falls County, lime 1,100-04 feet, initial production 16 bbls. per hour flowing, total depth 1,104 feet; No. 1 Hanson, dry and abandoned, total depth 1,151 feet. F. P. Cullum's No. 1 Pace, dry and abandoned, total depth 1,235 feet. Cullum and Alexander's No. 5-A Falls County, lime 1,085-1,100 feet, initial production 7 bbls. per hour flowing, total depth 1,100 feet, treated with acid; No. 6-A Falls County, lime 1,093-1,104 feet, initial production 23 bbls. per hour flowing, total depth 1,104 feet, treated with acid. Cullum and Sinclair Prairie Oil Co.'s No. 8 Falls County-Scranton, lime 1,101-18 feet, initial production 58 bbls. per hour flowing, total depth 1,118 feet, treated with acid.

A. R. Dillard's No. 3 Green, lime 1,260-69 feet, initial production 10 bbls., total depth 1,269 feet, treated with acid. Fain & McGaha and Humble Oil & Refining Co.'s No. 32 Logan, lime 1,139-46 feet, initial production 200 bbls., total depth 1,146 feet; No. 33 Logan, lime 1,151-55 feet, initial production 150 bbls., total depth 1,155 feet. Gilles and others' No. 1 E. E. Threet, abandoned, total depth 1,167 feet. N. D. Goldsmith and others' No. 1 Bishop, lime 1.408-21 feet, initial production 25 bbls., total depth 1,421 feet, treated with acid. J. C. Hamer's No. 3 Longley, oil sand 963-65 feet, initial production 120 bbls., total depth 965 feet. W. B. Hamilton's No. 28 Abercrombie, lime 1,167-81 feet, initial production 73 bbls., total depth 1,181 feet, treated with acid; No. 14 Pace, lime 1,138-49 feet, initial production 97 bbls., total depth 1,149 feet, treated with acid.

Luke Hodges' No. 1 Wilson, dry and abandoned, total depth 1,750 feet. Howitz and Oldham's No. 1 Lauster, lime 1,192-1,206 feet, initial production 15 bbls., total depth 1,206 feet, treated with acid. D. O. Johnson's No. 1 Wilson, dry and abandoned, total depth 1,386 feet. C. B. Long's No. 13 Logan, lime 1,152-63 feet, initial production 70 bbls., total depth 1,163 feet. Maro Oil Co.'s No. 1 Justice, dry and abandoned, total depth 1,133 feet. McIntyre and Rosenthal's No. 1-B Anderson, lime 1,414-26 feet, initial production 20 bbls. of oil and 25 bbls. of salt water, total depth 1,426 feet, treated with acid. George L. Pace's No. 7 Abercrombie, lime 1,132-46 feet, initial production 150 bbls., total depth 1,146 feet; No. 13 Arnold, lime 1,173-81 feet, initial production 40 bbls., total depth 1,181 feet, treated with acid; No. 10 Green,

(Continued on Page 54)

Wildcat Operations in West Texas

Week Ending June 11

ANDREWS COUNTY

Company, well, farm name, section and block—	Remarks:
Fuhrman Pet. Co.'s No. 1-B Bonner, 1,320 ft. from N line and 1,320 ft. from E line of Sec. 25, Blk. A-43, P.S.L. Sur.	T.D. 4,493 ft.; flowed 400 bbls. while cleaning out.
Honolulu and Llano Oil Co.'s No. 1 J. E. Parker, 1,320 ft. from S line and 1,470 ft. from W line of Sec. 7, Blk. A-44, P.S.L. Sur.	Location.
Humble Oil & Ref. Co.'s No. 1 R. M. Means, 660 ft. from N and 660 ft. from E of Sec. 2, Blk. 2-35, P.S.L. Sur.	Drlg. 3,535 ft.
Humble Oil & Ref. Co.'s No. 1 Kuykendall, 1,320 ft. from S and E lines of Sec. 24, Blk. A-46, P.S.L. Sur.	T.D. 4,511 ft.; plugging back; swabbed 60 bbls. in 4 hrs.
Llano Oil Co.'s No. 1 J. E. Parker, 330 ft. from N line, 990 ft. from E line of Sec. 18, Blk. A-44, P.S.L. Sur.	Location.

BORDEN COUNTY

Continental Oil Co.'s No. 1 Johnson, 660 ft. from S line and 660 ft. from E line of Sec. 34, Blk. 35, Twp. 4n, T.&P. Sur.	Fishing 445 ft.

BREWSTER COUNTY

Joiner-McIntyre's No. 1, 853 ft. from S, 2,590 ft. from E of Sec. 31, Blk. 352, W. M. Mitchell Sur.	S.D. 1,450 ft.

COKE COUNTY

Wm. Hooper's No. 1 Gaston, 240 ft. from S line and 654 ft. from W line of Joseph Sur. No. 11	S.D. 2,405 ft.

CRANE COUNTY

Brandon et al's No. 1 J. Cowdez, 330 ft. from N and 330 ft. from W line of Sec. 13, Blk. X, C.C.S.D.& R.G.N.G. Sur.	Moving in material.
Gulf Prod. Co.'s No. 1 E. M. Snodgrass, 1,320 ft. from N and 1,320 ft. from W line of Sec. 1, Blk. B-25, P.S.L. Sur.	Location.
Wahlenmaier Petroleum Corp.'s No. 1 W. P. Edwards, 330 ft. from N and 330 ft. from E of SW cor. of the NE of Sec. 12, Blk. B-23, P.S.L. Sur.	Bailed 60 bbls. in 10 hrs.; T.D. 3,720 ft.; S.D. to run csg.

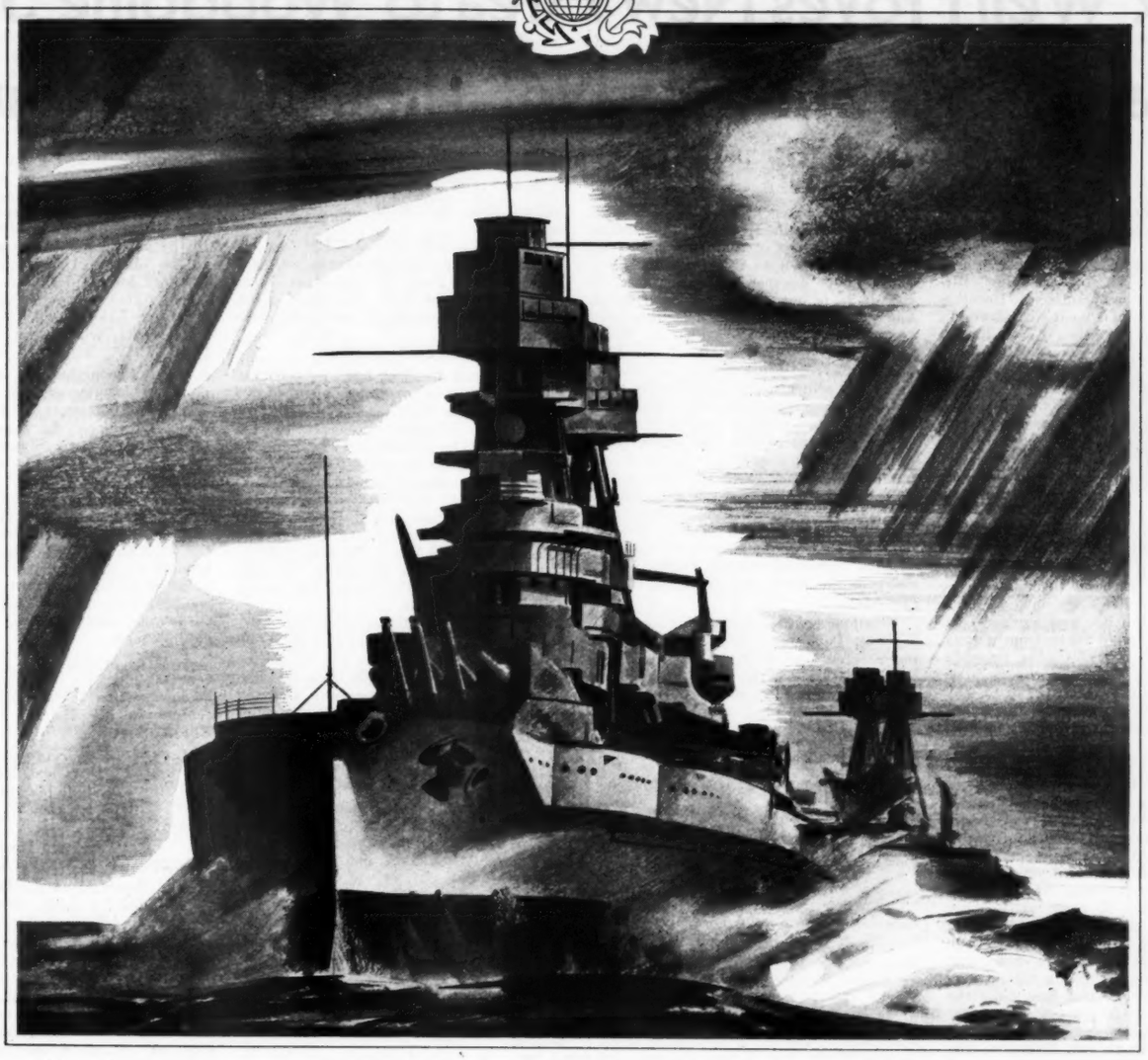
CROCKETT COUNTY

J. D. Young's No. 1 Shannon, 330 ft. from W line, 330 ft. from N line of Sec. 35, Blk. 1, G.C.&S.F. Sur.	S.D. 2,635 ft.

CULBERSON COUNTY

Miller Bros.' No. 1 fee, 1,980 ft. from N and 660 ft. from E line of Sec. 21, Blk. 97, P.S.L. Sur.	S.D. 1,110 ft.

(Continued on Page 60)



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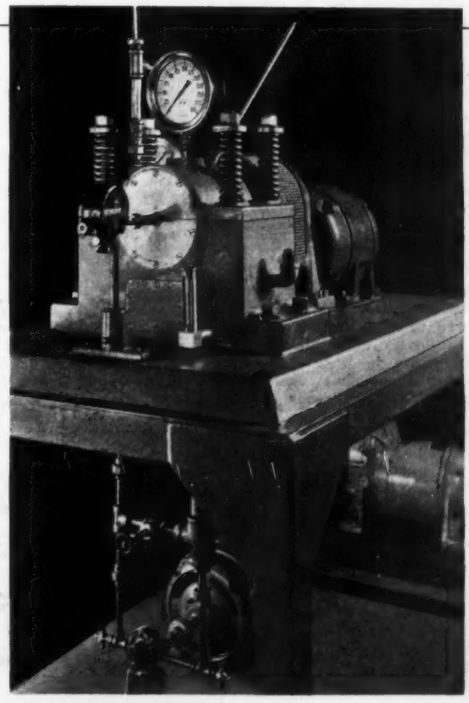


SHELL

PETROLEUM PRODUCTS

Rusk Well Proves New Area to Woodbine Sand; Salt Water Showing Not Thought Important

By L. E. BREDBERG

DALLAS, Tex., June 11.—The central Cherokee County discovery of T. J. Wood, R. Young, Wolfe and others on the New Birmingham Development Co.'s lands in the Levi Jordan Survey, 6 miles southwest of the town of Rusk, definitely established it is making some salt water when tested on June 10 and 11. However, it proves the area to Woodbine sand production, opening the third producing area in the county.

On June 10 it was opened from 6 to 7 p.m., flowing through three-sixteenths inch choke. It made 17.87 bbls. of fluid, 8.4 per cent being b.s. and 1.6 per cent salt water. A sample taken from a tank showed 6 per cent b.s. Casing pressure was 350 pounds, closed in tubing pressure was 550 pounds. From 10 to 11 p.m. it was flowed through five-thirty-seconds inch choke on casing, making 11 bbls. of fluid, of which 1 per cent was b.s. The casing pressure then was 400 pounds and closed in tubing pressure 700 pounds.

From 6 to 7 a.m. on June 11 it made 9.62 bbls. of fluid through five-thirty-seconds inch choke on casing, of which two-tenths of 1 per cent was salt water and six-tenths of 1 per cent was b.s. The gravity of the oil increased to 42.2 A.P.I.

During the first 22 consecutive hours on production, the well flowed 316.24 bbls. of fluid. It is now flowing through five-thirty-seconds inch casing choke, and has not been flowed through tubing during the time tested. The first time the separator was bled 80 per cent salt water showed, which led many skeptics to believe the well was ruined. However, this was an accumulation and meant little if anything as to the possibilities of the well. The water percentage is reduced on chokes while the pressure increases, and the salt water showing made is not expected to slow up the lease and royalty play in the area and county to any perceptible extent.

The Texas Pipe Line Co. has connected a combination 4 and 6-inch line with the well and has two suction pumps on the line ready to take oil from the discovery until the Railroad Commission issues emergency orders curtailing the production to a percentage of its potential.

Shooting Crews at Work

Major companies have shooting crews reworking the area to check the area around the well to find whether only a surface and subsurface high maintains a producing structure in the area, or whether another shore line condition exists, similar to the East Texas Field, but hoped and expected to be much smaller. Many operators and companies are playing it, feeling that the shore line extends to the north and northeast through the town of Rusk. The C. & G. Oil Co. of Dallas has already contracted to drill a wildcat between one-half and a mile east of the town of Rusk on New Birmingham Development Co. acreage. The location is in the southwest corner of the Z. Gibbs Survey. It will be about 6 miles airline northeast of the discovery, and will be the first well to indicate what might be expected, and if the shore line belief is correct.

Colonel Hughes of Bagdad, Fla., is taking over Lewis' No. 1 Bradford test, in the J. Laprella Survey approximately 10 miles due east of the Wood discovery, and will carry it to the Woodbine sand. This will be another interesting test, although it is out of the supposed trend, and rather distant. Another interesting test is expected to be drilled by Texas Co. in the southwest part of the Levi Jordan Survey, southwest of the discovery. This will also be an indicative well.

Independent operators who have made and are still making money in East Texas Field properties are vieing with the major companies for leases and royalties in the Rusk area, and also in the central and southern part of the county. This is what is causing the exceptionally hot play in the area. The shore line belief also plays an important part in the spirited lease and royalty buying, especially to the north and northeast of the discovery.

Whether Humble Oil & Refining Co. or Shell Petroleum Corp. has purchased the acreage held by Tom Wood and his associates around the well, and within the large Shell Petroleum Corp. block, is not yet known, but they have been on deals with these companies, and are expected to turn the deal to one of the two. They still hold around 800 acres near the well, the majority of which they obtained from the Shell for drilling the test.

The hole is bottomed at 5,120 feet, according to the drilling contractor, who also said that about 17 feet of sand and broken sand and shale had been cored, only 2 feet of sand being recovered, however.

CAYUGA FIELD

The Cayuga Field of northwest Anderson County, was extended about 5,000 feet due south this week and is slated for nearly 1½-mile extension to the northwest. The southern extension was drilled by the joint owners of the large block surrounding the discovery well, Tide Water Oil Co. and Texas Seaboard Oil Co. It is their No. 2 Edens in the Samuel Snider Survey. It flowed 180 bbls. the first 18 hours through a three-sixteenths inch choke on tubing. The tubing pressure was 450 pounds and casing pressure 375 pounds.

Roeser and Pendleton, Inc., of Fort Worth, have set 7-inch casing at 4,040 feet on No. 1 Bowyer, in the E. Ritter Survey, northwest of the Cayuga discovery, after coring some sand showing oil from 4,037-47 feet, and some sand showing oil from 4,047-65 feet. This last core showed 1 foot of saturated sand, 2 feet of ashy sand with spots showing oil, and 2 feet of ashy sand with shale streaks. This will be the first extension west of the discovery, although it is more to the north than to the west.

One operator has been purchasing a block of leases in the trend between the Cayuga area in northwest Anderson and the Long Lake area in southwest Anderson County, with intention of drilling a test.

Hunt Production Co. of Tyler is to drill an interesting test approximately 2½ miles northeast of the Long Lake Field, on the A. L. Temple and C. A. Miller farm in the Simon Sanches Survey. This area now has three gas wells and two oil producers, and is defined only to the west and northwest, consequently a test in the opposite direction will be of utmost importance. Tide Water Oil Co. and Texas Seaboard Oil Co. brought in this pool last September, but a majority of gas wells, with only a comparatively small amount of oil in their other two wells led them to delay developments.

An area around 7 or 7½ miles northeast of Palestine in Anderson County, is now getting a lease play. The leasing centers in the H. W. Dykes and W. Elliott Surveys.

Rio Oil Co. will probably announce a location on its wildcat block near Fairfield in Freestone County, soon. This block centers in the W. M. C. Jones Survey.

Acreage Deals

Three miles southwest of Grand Saline in Van Zandt County, Overton Refining Co., headed by J. D. Wrather, has assembled a block of 4,000 acres for a Woodbine sand test. The block centers in the V. Burch, Hutton and Richardson Surveys.

John Golden has leased around 13,000 acres northwest of the town of Greenville in Hunt County, for a Woodbine sand test. G. S. & S. Co. will help in drilling the test which is on the Oscar Popper farm in the James Moore Survey.

A block of 6,000 acres has been leased centering in the Miro Survey, east of the town of Bigota in Red River County, for a test, and J. H. Dinger of Longview has assembled around 7,000 acres south and west of Detroit for a 4,000-foot test. The block centers in the J. Guest Survey, and is also in Red River County.

D. A. Hale and others have a derrick up on the L. M. Hall farm in the northeast corner of a 70-acre tract in the A. Karo Survey No. 143, near the town of Miller Grove in Hopkins County.

Five miles northwest of Thornton in Limestone County, D. J. Crawford of Dallas has leased a block of approximately 6,000 acres on which a test will probably be put down within the near future.

EAST TEXAS FIELD

Regardless of the Railroad Commission rescinding its order allowing the drilling of equidistant offsets, which caused the filing of hundreds of applications for permits for unnecessary wells in the East Texas Field, operators and companies continue to stake many locations. This week there were 104 locations made. There are now over 13,500 producers. There were 87 completions listed during the week.

The Jamestown area, north of the main part of the field, Upshur County, in which there are several wells producing at a subsea depth below the regular depth at which production is found in the main part of the field to the

East Central Texas Wildcats

Week Ending June 11

ANDERSON COUNTY

Company, well, farm name, section and block—	Remarks
Barnsdall Oil Co.'s No. 1 Loper, 467 ft. from N and W lines of 40-ac. tract, 1 mile SW of Cayuga, James Wilson Sur.	Drlg. 1,675 ft.
Harry Bass et al's No. 1 J. A. Campbell, 467 ft. from N and W lines of 151.30-ac. tract, James Wilson Sur.	Location.
Pete Burton et al's No. 1 Freeman Baptist Church, 105 ft. due W of NW cor. of W. Chancellor Sur. in center of a 2-ac. tract, W. T. Meredith Sur.	Location.
Byrd-Frost et al's No. 1 Alice Scott, 2,300 ft. from N and 700 ft. from E lines of Joseph Crawford Sur., 1¼ miles NW of Slocum	Abnd. 5,554 ft.
Byron and Jameson's No. 1 S. N. Price, 330 ft. from S and E lines of S. N. Price 60-ac. tract, Juan Y'Barbo Sur., 3 miles NE of Blackfoot	S.D. 4,974 ft.
Hill and Hill's No. 1 R. E. Curtis, 467 ft. from N line and 250 ft. from W line of tract, B. Kimbrough Sur.	Location.
J. R. Meeker's No. 1 H. H. Duncan, 150 ft. from N and S lines and 419 ft. from W line of 12.97-ac. tract, one-quarter mile NE of Cayuga, A. Enes Sur.	Abnd.
Roeser and Pendleton's No. 1 Virginia Boyer, 467 ft. from E line and 1,347 ft. from S line of 200-ac. tract, Everett Ritter Sur.	Waiting on cmt. to set; T.D. 4,055 ft.
Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 2 Rampy, 467 ft. from N and W lines of lease, James Wilson Sur.	Drlg. 1,215 ft.
Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 1 G. W. Ware, 467 ft. from S line and 1,400 ft. from W line of 571.65-ac. tract, Thomas Bristow Sur.	Location.
Texas Seaboard Oil Co. and Tide Water Oil Co.'s No. 2 Edens, 1,400 ft. from E line and 2,333 ft. N of S line of Samuel Snider Sur.	Flowed 24 bbls. per hr. through 11/16-in. tubing choke.
Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 1 Lou Ella Horton, 467 ft. from N line and 467 ft. from E line of Horton 105.37-ac. tract, James Wilson Sur.	Waiting on cmt. to set 4,072 ft.
Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 1 S. F. Robertson, 470 ft. from N line and 1,566 ft. from W line of 50.4-ac. tract, Samuel Edmondson Sur.	Waiting on cmt. to set 4,070 ft.
Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 4 Wills, 470 ft. from most northerly S line and 467 ft. from E line of tract, W offset to Hill and Hill's No. 1 Tubbs, Samuel Edmondson Sur.	Waiting on cmt. to set; T.D. 4,076 ft.
Tide Water Oil Co. and Texas Seaboard Oil Co.'s No. 5 Wills, 1,400 ft. from most northerly S line and 467 ft. from E line of tract, W offset to Barnsdall Oil Co.'s No. 1 Tubbs, Samuel Edmondson Sur.	Drlg. 3,545 ft.
CHEROKEE COUNTY	
A. R. Lewis et al's No. 1 J. Bradford, 1,660 ft. from W line and 300 ft. from N line of 50-ac. tract, J. Laprella Sur.	S.D. 2,825 ft.
A. F. Richardson's No. 1 P. Wood, 660 ft. from N line, 1,320 ft. from E line of 498-ac. tract, 14 miles E of Jacksonville, on Cherokee-Rusk County line, Ignacio Sanches Sur.	Derrick.
T. J. Wood et al's No. 1 New Birmingham, 660 ft. from S and E lines of 1,124-ac. tract, 7 miles SW of Rusk, Levi Jordan Sur.	Flowed 195 bbls. through 3/16-in. tubing choke; showing salt wtr.

(Continued on Page 58)

south, is apparently due for considerable drilling. Eastern Texas Petroleum Corp., a new organization formed by Freeman W. Burford, who recently sold the large holdings of the East Texas Oil & Refining Co., which he headed, in the East Texas Field, is planning to drill around 50 tests in this area. Last week his company brought in a 50-bbl.-per-hour well on the D. F. Smith farm in the T. J. McKey Survey, approximately a quarter of a mile north of production. Sand was logged from 3,573-78 feet, the latter being total depth. Elevation is 248 feet. The company has acquired a half interest in approximately 1,200 acres in the area.

Ernest O. Thompson, railroad commissioner, stated in Washington that overproduction in the field would be stopped if the commission was given time, but this promise has been made so often that no one takes heed of it in the field. Another "hot oil merchant" was found to have connected to one major company's well and was running oil from this well through another major company's pipe line to a refinery. The second company discovered to what use its line was being put so pumped cement in the line.

Another "hot oil merchant" was found appropriating oil from a major company, but when the line was traced it was found it led to several branches, each to a different refinery.

The Federal authorities are about to file several cases in court at Tyler, the majority of which pertain to violations of the producing and refining code. Charles I. Francis, special assistant to the U. S. Attorney General, will file criminal charges against the operators involved.

R. D. Parker, former chief supervisor of the Railroad Commission, but more recently in charge of the field forces in East Texas, at Kilgore, has refused to run for railroad commissioner against the incumbent, Lon Smith. Many operators were hoping that he would run.

COMPLETIONS IN EAST TEXAS

Gregg County

Amada's No. 5 Magrill, top sand 3,638 feet, initial production 75 bbls., total depth 3,708 feet. Arkansas Fuel Oil Co.'s No. 23 Burnside, top sand 3,479 feet, initial production 48 bbls., total depth 3,503 feet; No. 7 J. Whittaker and others, top sand 3,498 feet, initial production 47 bbls., total depth 3,523 feet. Atlantic Oil Producing Co.'s No. 58 Hayes, top sand 3,506 feet, initial production 31 bbls., total depth 3,560 feet. Barnsdall Oil Co.'s No. 16 J. J. McGrede, top sand 3,615 feet, initial production 75 bbls. per hour through open tubing, total depth 3,645 feet. Joe Beard and others' No. 6 Fuller, top sand 3,687 feet, initial production 25 bbls., total depth 3,729 feet. Clark and Cowden's No. 2 Mosley, top sand 3,467 feet, initial production 25 bbls., total depth 3,535 feet. Empire Gas & Fuel Co.'s No. 18 T. W. Rae, top sand 3,534 feet, initial production 25 bbls., total depth 3,564 feet; No. 6 J. L. Spurrier, top sand 3,559 feet, initial production 30 bbls., total depth 3,646 feet.

F. H. E. Oil Co.'s No. 12 B. C. Christian, top sand 3,647 feet, initial production 41 bbls., total depth 3,687 feet; No. 8 R. Christian, top sand 3,610 feet, initial production 39 bbls., total depth 3,651 feet. General Crude Oil Co.'s No. 9 Barnswell, top sand 3,480 feet, initial production 21 bbls., total depth 3,516 feet. Humble Oil & Refining Co.'s No. 6-A Shepherd, top sand 3,655 feet, initial production 16 bbls., total depth 3,713 feet. Iowa-Payne Oil Co.'s No. 5 W. H. York, top sand 3,590 feet, initial production 75 bbls., total depth 3,597 feet. Lanier and Collins' No. 4 Clements, top sand 3,536 feet, initial production 50 bbls. in one-half hour through open tubing, total depth 3,566 feet. Magnolia Petroleum Co.'s No. 7 R. L. Salter, top sand 3,631 feet, initial production 108 bbls., total depth 3,646 feet. Rowan and Nichols' No. 5-B Todd, top sand 3,572 feet, initial production 120 bbls., total depth 3,632 feet. Selby Oil & Gas Co.'s No. 12-C Snavely heirs, top sand 3,575 feet, initial production 48 bbls., total depth 3,588 feet; No. 4-D Snavely, top sand 3,571 feet, initial production 44 bbls., total depth 3,586 feet.

Shell Petroleum Corp.'s No. 8 Jones, top sand 3,525 feet, initial production 32 bbls. in one-half hour through open tubing, total depth 3,593 feet; No. 14 A. and D. King, top sand 3,542 feet, initial production 40 bbls. in one-half hour through open tubing, total depth 3,610 feet; No. 11 Slaughter, top sand 3,551 feet, initial production 60 bbls. per hour through open tubing, total depth 3,620 feet. Sun Oil Co.'s No. 3 Pressley, dry and abandoned, total depth 3,685 feet. Tide Water Oil Co.'s No. 27 Lake Devernia, top sand 3,487 feet, initial production 30 bbls. in 10 minutes through open tubing, total depth 3,529 feet. J. M. Weaver, receiver's No. 3 Doby, top sand 3,492 feet, initial production 30 bbls. in 20 minutes through open tubing, total depth 3,525 feet. Yount Lee Oil Co.'s No. 5 Denson, top sand 3,627 feet, initial production 60 bbls., total depth 3,647 feet. McAlester Drilling Co.'s No. 6-O Sabine River, top sand 3,519 feet, initial production 15 bbls. in one-half hour through open tubing, total depth 3,549 feet.

Herman Braum's No. 2-B W. A. Southworth, top sand 3,540 feet, initial production 87 bbls., total depth 3,577 feet. D. D. D. Oil Co.'s No. 2 E. Hagler, top sand 3,567 feet, initial production 87 bbls., total depth 3,578 feet. Empire Gas & Fuel Co.'s No. 8 A. A. Lockhart, top sand 3,639 feet, initial production 26 bbls., total depth 3,645 feet; No. 6 Muckelroy, top sand 3,550 feet, initial production 33 bbls., total depth 3,593 feet. Federal Oil Co.'s No. 2-B W. Smith, top sand 3,552 feet, initial production 80 bbls., total depth 3,562 feet. Gulf Production Co.'s No. 30 C. Brown, top sand 3,517 feet, initial production 77 bbls., total depth 3,544 feet; No. 21 Culver, top sand 3,521 feet, initial production 50 bbls., total depth 3,570 feet; No. 11 Watson, top sand 3,554 feet, initial production 84 bbls., total depth 3,580 feet.

Invincible Oil Co.'s No. 21 Weiss, top sand 3,518 feet, initial production 125 bbls., total depth 3,535 feet. Johnston-Owen's No. 8-C Cole, top sand 3,515 feet, initial production 60 bbls., total depth 3,540 feet. Louisiana Oil Refining Co.'s No. 5 Griffin, top sand 3,554 feet, initial production 32 bbls., total depth 3,583 feet. Magnolia Petroleum Co.'s No. 24 J. Radford, top sand 3,637 feet, initial production 97 bbls., total depth 3,644 feet. W. H. Mathews' No. 4 Martin, top sand 3,740 feet, initial production 150 bbls., total depth 3,743 feet. George Pendergast's No. 4 Beall, top sand 3,547 feet, initial production 80 bbls., total depth 3,560 feet. Refugio Oil Co.'s No. 3 Hughes, top sand 3,485 feet, initial production 100 bbls. per hour through open tubing, total depth 3,539 feet. J. S. Rushing's No. 3 H. McNeely, top sand 3,667 feet, initial production 100 bbls. per hour through open tubing, total depth 3,675 feet. Selby and Lewis' No. 10 Cole, top sand 3,542 feet, initial production 40 bbls., total depth 3,562 feet. Shell Petroleum Corp.'s No. 10 E. W. Willoughby, top sand 3,532 feet, initial production 34 bbls., total depth 3,607 feet. L. L. Sugar's No. 2 Griffin, top sand 3,526 feet, initial production 30 bbls., total depth 3,549 feet.

Rusk County

B. G. Burnett's No. 3 I.&G.N., top sand 3,785 feet, initial production 40 bbls., total depth 3,786 feet. Brown and Wilson's No. 3 Terrell, top sand 3,670 feet, initial production 60 bbls., total depth 3,672 feet. Gulf Production Co.'s No. 13 Florence, top sand 3,663 feet, initial production 56 bbls., total depth 3,669 feet. Humble Oil & Refining Co.'s No. 109 Green, top sand 3,590 feet, initial production 93 bbls., total depth 3,599 feet; No. 111 L. D. Crim, top sand 3,618 feet, initial production 110 bbls., total depth 3,628 feet. S. S. Laird Oil Co.'s No. 6 J. N. Peterson, top sand 3,595 feet, initial production 45 bbls., total depth 3,622 feet. Dunning and McMann's No. 6 J. N. Peterson, top sand, 3,610 feet, initial production 30 bbls., total depth 3,637 feet. Olvey and Sample's No. 6 L. D. Crim, top sand 3,704 feet, initial production 125 bbls., total depth 3,742 feet.

Sampson and Crane's No. 2 Gill, top sand 3,631 feet, initial production 40 bbls., total depth 3,633 feet. Sun Oil Co.'s No. 14 Beall, top sand 3,590 feet, initial production 60 bbls., total depth 3,602 feet. Texas Co.'s No. 20 H. T. Elder, top sand 3,634 feet, initial production 35 bbls., total depth 3,656 feet. Aston Oil Co.'s No. 8 Alford, top sand 3,666 feet, initial production 20 bbls., total depth 3,732 feet. Big Four Oil Co.'s No. 5 Perry, top sand 3,634 feet, initial production 15 bbls., total depth 3,661 feet. E. P. Carey's No. 5 R. Redwine, top sand 3,548 feet, initial production 15 bbls. per hour on air lift, total depth 3,596 feet. R. W. Fair's No. 8 fee, top sand 3,630 feet, initial production 100 bbls., total depth 3,639 feet. Gulf Production Co.'s No. 8 S. B. Stone, top sand 3,785 feet, initial production 53 bbls. through three-quarters inch tubing choke, total depth 3,790 feet. Haynes Drilling Co.'s No. 7 J. T. Brown, top sand 3,685 feet, initial production 36 bbls., total depth 3,695 feet.

Humble Oil & Refining Co.'s No. 4 Florence, top sand 3,692 feet, initial production 72 bbls., total depth 3,713 feet; No. 16 W. A. Mulikan, top sand 3,672 feet, initial production 38 bbls., total depth 3,763 feet; No. 38-A Selvey, top sand 3,712 feet, initial production 44 bbls., total depth 3,760 feet; No. 11-A V. Turner, top sand 3,726 feet, initial production 35 bbls., total depth 3,746 feet. Mid-Kansas Oil & Gas Co.'s No. 62 Grissom, top sand 3,679 feet, initial production 88 bbls. per hour through open tubing, total depth 3,684 feet. Octo Oil Co.'s No. 1 E. L. Pinkston, top sand 3,578 feet, initial production 30 bbls., total depth 3,625 feet. Oil Production, Inc.'s No. 6 Harmon, top sand 3,716 feet, initial production 125 bbls., total depth 3,849 feet. Spansco Oil Co.'s No. 9 W. P. Britt, top sand 3,695 feet, initial production 40 bbls., total depth 3,733 feet. Standard of Kansas' No. 4 C. F. O'Quinn, top sand 3,780 feet, initial production 80 bbls., total depth 3,792 feet. Stanolind Oil & Gas Co.'s No. 3 O. H. Grissom, top sand 3,681 feet, initial production 35 bbls., total depth 3,690 feet. Tysco Oil Co.'s No. 2-B Frederick, top sand 3,560 feet, initial production 20 bbls., total depth 3,630 feet. Ward Oil Co.'s No. 11 A. P. Finney, top sand 3,668 feet, initial production 49 bbls., total depth 3,800 feet.

Smith County

Nelston Pruitt's No. 3 Thompson, top sand 3,685 feet, initial production 100 bbls., total depth 3,689 feet. W. L. Sessions' No. 6 Stone, top sand 3,785 feet, initial production 40 bbls., total depth 3,787 feet. Sun Oil Co.'s No. 2-B J. J. Denton, top sand 3,735 feet, initial production 64 bbls. per hour through open tubing, total depth 3,740 feet; No. 17 J. D. Denson, top sand 3,648 feet, initial production 62 bbls., total depth 3,654 feet.

Upshur County

C. H. Brown's No. 1-B W. Starr, top sand 3,582 feet, initial production 22 bbls. per hour through open tubing, total depth 3,589 feet. Eastern Texas Petroleum Co.'s No. 1 D. F. Smith, top sand 3,573 feet, initial production 50 bbls., total depth 3,578 feet. C. H. Lyons' No. 4 T. J. Dunbar, top sand 3,668 feet, initial production 30 bbls., total depth 3,674 feet. Magnolia Petroleum Co.'s No. 5 C. Brooks, top sand 3,640 feet, initial production 90 bbls., total depth 3,649 feet. Sabinas Oil Corp.'s No. 13-C Collins, top sand 3,700 feet, initial production 20 bbls., total depth 3,710 feet. E. L. Smith's No. 4 E. A. Watts, top sand 3,615 feet, initial production 20 bbls., total depth 3,628 feet. Stroube and Stroube's No. 16 R. J. Mackey, top sand 3,643 feet, initial production 90 bbls., total depth 3,652 feet.

The Oil Man's Calendar

June

14—Cincinnati, Ohio. — Cincinnati Oil Club annual picnic.

14-15 — Grand Forks, N. Dak., Northwest Petroleum Association, North Dakota Division, Dacotah Hotel.

14-15—State College, Pa., Pennsylvania Grade Crude Oil Association.

17-22—Saranac, N. Y., Society of Automotive Engineers, Saranac Inn.

20-23—State College, Pa., A.S.M.E. National Oil and Gas Power meeting.

25-29—Denver, Colo., American Society of Mechanical Engineers, Cosmopolitan Hotel.

25-29—Atlantic City, N. J., American Society for Testing Materials, annual meeting.

28-29—Charleston, W. Va., West Virginia Oil Marketers Association.

July

9-10—Rapid City, S. Dak., South Dakota Independent Oil Men's Association.

August

24-27—Titusville, Pa., Drake Well Memorial Celebration.

September

Atlantic City, N. J., North American Gasoline Tax Conference.

9 — Wernersville, Pa., American Trade Association executives.

10-14 — Cleveland, Ohio, American Chemical Society.

11-12 — Louisville, Ky., Kentucky Petroleum Marketers Association, Brown Hotel (dates tentative).

19-21 — Atlantic City, N. J., National Petroleum Association.

26-27 — Columbus, Ohio, Ohio Petroleum Marketers Association, Deshler-Wallick Hotel.

October

1-5—Cleveland, Ohio, National Safety Council, Cleveland, Statler, Carter and Hollenden Hotels.

9—Michigan Independent Petroleum Distributors Association, place to be named later.

12-13—American Institute of Mining Engineers, Petroleum Division, fall meeting, Tulsa, Mayo Hotel.

16-18—Big Four State Jobbers Association Convention, Kansas City, Mo.

29—American Gas Association Convention and Exhibition, Atlantic City, N. J.

November

5-9—Cleveland, Ohio, Automotive Service Industries Show, Cleveland Public Auditorium.

Los Angeles, Calif., American Association of Petroleum Geologists, Pacific section.

12-15—Dallas, Tex., annual meeting, A.P.I.

December

3-8—New York, National Exposition of Power and Mechanical Engineering, Grand Central Palace.

January

7—New York, Society of Automotive Engineers, annual dinner.

West Texas Fields

(Continued from Page 50)

lime 1,158-74 feet, initial production 125 bbls., total depth 1,174 feet, treated with acid.

Panhandle Refining Co.'s No. 5 Anderson, lime 1,387-1,406 feet, initial production 125 bbls. of oil and 25 bbls. of salt water, total depth 1,423 feet; No. 6 Anderson, lime 1,404-12 feet, initial production 35 bbls., total depth 1,412 feet, treated with acid. Perkins and Cullum's No. 10-C Falls County, lime 1,158-75 feet, initial production 225 bbls., total depth 1,175 feet, treated with acid; No. 18 Falls-Titken, lime 1,134-61 feet, initial production 50 bbls. per hour, total depth 1,161 feet, treated with acid. Tex-Ho Oil Co.'s No. 5 Anderson, lime 1,417-22 feet, initial production 200 bbls., total depth 1,422 feet, treated with acid. Texas Co.'s No. 1 Cuba, lime 1,389-97 feet, initial production 353 bbls., total depth 1,397 feet, treated with acid. Underwood and Campbell's No. 2-B Campbell, lime 933-48 feet, initial production 96 bbls., total depth 948 feet, treated with acid. Whatley and Whatley's No. 4 Justice, lime 1,079-92 feet, initial production 50 bbls., total depth 1,092 feet.

Cooke County

Accumulative Royalty Co.'s No. 1 Biffle, dry and abandoned, total depth 1,-905 feet. E. J. Ruwaldt's No. 1 True, oil sand 1,080-88 feet, initial production 20 bbls. of oil and 7 bbls. of salt water, total depth 1,088 feet.

Denton County

Accumulative Royalty Corp.'s No. 1 Slaughter, dry and abandoned, total depth 1,876 feet.

Foard County

Texas Co.'s No. 4 Johnson, lime 3,581-91 feet, initial production 2,000 bbls. of oil and 1,500,000 feet of gas, total depth 3,591 feet.

Jack County

T. M. McDaniels' No. 3 Bloodworth, oil sand 275-92 feet, initial production 12 bbls., total depth 292 feet. N. H. Martin and Son's No. 1 Bloodworth, oil sand 281-92 feet, initial production 25 bbls., total depth 292 feet. Petroleum Producers Co.'s No. 1 Sewell, oil sand 281-85 feet, initial production 5 bbls., total depth 285 feet. Dan E. Whatley's No. 3 Shown, dry and abandoned, total depth 350 feet; No. 5 Shown, dry and abandoned, total depth 346 feet.

Montague County

Texas Co.'s No. 1 Field, oil sand 1,-706-11 feet, initial production 12 bbls., total depth 1,711 feet.

Wichita County

Humble Oil & Refining Co.'s No. 15 Wichita-Taylor, dry and abandoned, total depth 1,841 feet. J. J. Moran's No. 1 Hodges, dry and abandoned, total depth 2,000 feet. Petroleum Producers Co.'s No. 36 Allen and Kemp, dry and abandoned, total depth 1,500 feet. D. M. Ross' No. 2 Waggoner Brothers, dry and abandoned, total depth 1,921 feet. Staniforth and Ray's No. 1 J. J. Waggoner, dry and abandoned, total depth 1,828 feet.

Wilbarger County

Easter Oil Co.'s No. 4 W. T. Waggoner, oil sand 1,869-79 feet, initial production 67 bbls. first 10 hours, total depth 1,879 feet. Golding and Cochran's No. 8-C W. T. Waggoner, lime 2,530-46 feet, initial production 56 bbls., total depth 2,544 feet, treated with acid.

Young County

Petroleum Producers Co.'s No. 1 Whitt, oil sand 1,022-25 feet, initial production 25 bbls., total depth 1,025 feet. Pitzer and West's No. 3 Morrison, dry and abandoned, total depth 3,977 feet. T. G. Shaw Oil Corp.'s No. 1 Shatto, dry and abandoned, total depth 540 feet. H. S. Singleton's No. 1 Henderson, dry and abandoned, total depth 2,650 feet. Texas Co.'s No. 1 Green, dry and abandoned, total depth 662 feet.

COMPLETIONS IN RANGER DISTRICT

Brown County

D. R. Bailey's No. 1 R. W. Penticost, dry and abandoned, total depth 1,370 feet. Humble Oil & Refining Co.'s No. 1 E. P. and W. H. Kilgore, dry and abandoned, total depth 1,335 feet. Miller and others' No. 1 H. L. Cannon, dry and abandoned, total depth 595 feet. E. N. Shaffner's No. 1 Mary Bowden, lime 2,426-40 feet, initial production 50 bbls., total depth 2,453 feet, treated with acid.

Callahan County

Lawson and others' No. 8 Alexander, dry and abandoned, total depth 1,037 feet.

Eastland County

Lone Star Gas Co.'s No. 1 J. E. Kincade and others' show of oil 3,595-3,602 feet, shot 80 quarts from 3,579-3,603 feet, and 60 quarts from 3,495-3,510 feet, initial production 25 bbls., total depth 3,603 feet. Murry and McDavid's No. 3 J. W. Clark, show of oil 1,312 feet, initial production 15 bbls., total depth 1,320 feet.

Shackelford County

Albany Oil Co.'s No. 10 Jeter, dry and abandoned, total depth 960 feet. Grisham and Hunter's No. 4 Ward, show of oil 2,084-90 feet, initial production 40 bbls., total depth 2,090 feet. Knight and others' No. 6 Jeter, show of oil 1,181-86 feet, initial production 80 bbls., total depth 1,186 feet. Reynolds and Richardson's No. 2-34 J. B. Matthews, dry and abandoned, total depth 1,176 feet. A. C. Walker's No. 5 B. S. Walker, dry and abandoned, total depth 490 feet. L. A. Warren and others' No. 1 Mathews, dry and abandoned, total depth 920 feet.

Loving County

In Loving County, D. C. Evans and others are rigging up a wildcat on a 3,600-acre block on the W. B. Johnson land in Section 12, Block 57, T.&P. Survey. It is to be drilled to the Delaware lime found just below 3,200 feet in this particular section. Several wells drilled in the area several years ago carried a showing of oil and the test is just west of these wells.

Cook and Scheig of Big Spring are reported to have a deal for a block of acreage in Andrews County and will start a test before the first of August. The acreage involved is all of Section 24, W half SE Section 23, W half SE Section 22, all of Sections 25, 26, 27, 28, 30, 31, 32 and 33, and the W half SE Section 29. Block 3, P.S.L. Survey, and 313 acres out of Section 5, Block A-19, P.S.L. Survey.

Fisher County

The Steele area, in Fisher County, got one of the best wells completed in that area for some time when Sinclair Prairie Oil Co. completed No. 3 Frank Steele for an initial production of 57 bbls. per hour from the lime topped at 3,195-3,212 feet, and bottomed at 3,215 feet. Prior to being treated with acid, the well flowed 30 bbls. per hour natural. It is in Section 72, Block 1, H.&T.C. Survey. In the same area, Roeser and Pendleton's No. 2 J. Steele topped the pay at 3,191 feet and was completed for an initial production of 20 bbls. of oil and 250 bbls. of salt water per hour. It is bottomed at 3,196 feet and is in Section 210, Block 1, B.B.B.&C. Survey.

Runnels County

Petroleum Interest, Inc.'s No. 1 T. B. Wade, in the McMillan Pool, Runnels County, showed oil from 2,502-13 feet in sand and is standing with 8¼-inch casing cemented at 2,502 feet. If the test makes a producer it will extend the field 1,000 feet northeast. It is in Subdivision No. 21, Norvell Travvis Survey No. 533.

Winkler County

The Scarborough Pool, Winkler County, got another nice well during the week when Magnolia Petroleum Co.'s No. 5 Scarborough flowed 771 bbls. in 24 hours through casing with tools in the hole. It blew in from a total depth of 2,843 feet. Several nice wells have been completed in the area lately and it is having quite a drilling program. There are 16 active tests in the pool, several about to be completed. Magnolia Petroleum Co.'s No. 5 Scarborough is in Section 18, Block 73, P.S.L. Survey.

WICHITA FALLS

There were 44 locations staked in the district during the past week about half of the number previously staked each week. The Railroad Commission is retarding the granting of permits due to new wells building up the potentials and making it difficult to hold the district within the present allowable. Fifty-seven tests were completed, 35 in the lime areas of Archer County, where acid treatment has spurred drilling for several months, and where many large wells have been completed after treating. Daily average production in the district was 61,305 bbls. for the week.

PANHANDLE DISTRICT

The old test of Devore and W. W. Woolsey on the Oxnard ranch, 6 miles southeast of Amarillo, shut down for several months, is to be carried deeper by Thornton Oxnard, owner of the ranch, and Harold English of Amarillo. Phillips Petroleum Co., which has furnished the fuel and casing used in drilling to the present depth, will continue co-operation. Total depth is now 5,065 feet. A string of 6⅝-inch casing has been purchased, steam power plant has been installed, and other equipment placed on the rig for carrying the test to at least 5,500 feet.

There were 15 new locations reported in the district this week, half of which were in Gray County. Wheeler County had five of the remainder.

Defenbaugh's No. 1 Bradshaw, in Section 26, Block 13, H.&G.N. Survey, southeast of the Osborne Pool in southeastern Wheeler County, looks like an extension producer. It encountered 1,000,000 feet of gas at 2,110 feet and a show of oil at 2,125 feet. It was shut down to move back the boilers. Most of the drilling in this county is near the western line, four tests in Sections 51, 52 and 54, Block 24, H.&G.N. Survey, now showing for producers.

The Collingsworth wildcat of George Milton and others in Section 8, Block 23, H.&G.N. Survey, south of McLean, is preparing to spud. Cable tools will be used. Several major companies have taken spreads.

Production in the district averaged 54,900 bbls. per day during the week.

PIPE LINE CONSTRUCTION

MICHIGAN LINES

MUSKEGON, Mich., June 11.—Pure Oil Pipe Line Co. last week increased the daily capacity of its 40-mile line from the Mount Pleasant Field to Bay City by completing installation of a new booster station. The station is equipped with two centrifugal pumps directly connected to two 250-horsepower electric motors. The new booster station is located on U. S. Highway 10 between the Purtell station and Bay City.

Construction of a new 4-inch welded oil pipe line from the Porter Pool to the new Mid-West refinery in Alma, a distance of about 13 miles, was scheduled to be started this week. The refinery, a 2,000-bbl. skimming plant, is nearing completion after several months' work.

SURVEY TO ILES DOME

DENVER, Colo., June 9.—Stanolind Oil & Gas Co.'s No. 6 Parkinson, Lot 37, SW Section 23-4n-92, Iles Dome, Moffat County, Colorado, is drilling at 2,275 feet. This is the only active operation in the Iles Pool. The field is producing around 1,300 bbls. daily, but all the wells are beaned down and the developed production is much larger. It is expected when the Dotsero cutoff is completed, shipments from the field to Utah Oil Refining Co.'s plant at Salt Lake City will be increased. This cutoff, which connects the Denver & Salt Lake with the Denver & Rio Grande Western railroad, will save around 300 miles in the haul eastward to Denver and back before shipments can start westward. The new route will be placed in operation next week. However, there is a report that the railroads have not put in as low rates on crude as expected and a Craig paper states the Stanolind company is making a reconnaisance survey for a pipe line from the field to Rifle, on the Denver & Rio Grande Western. Such a line would be around 60 miles long. The project is in a tentative stage and probably will not be built if freight rates are established which will offset the advantages of the pipe line.

CUT BANK PIPE LINES

MOOSE JAW, Saskatchewan, June 9. Fred Platt and J. Cadby of Shelby, Mont., are reported making a survey for an oil pipe line from the Cut Bank Field for the British American Oil Co., which is now operating refining plants here and at Coutts, Alberta. It is anticipated that the line, if ultimately constructed, will operate as the Toronto Pipe Line Co. The British American plants have been operating largely if not entirely on American crude.

It is understood also that the Texas Co. which already has a short line from the field to railhead at Cut Bank, which it purchased from the Santa Rita Oil & Gas Co., has received bids for a line from the field to its refinery at Sunburst.

HAMLIN BOOSTER STATION

FORT WORTH, Tex., June 11.—Humble Pipe Line Co. has near completion the Hamlin booster station, 6 miles northwest of Hamlin, Jones County, Texas. The capacity will be approximately 4,000 bbls. daily, delivered to Humble's main line station at Hawley, Tex. The station is equipped with 4½x12 Prescott pumps and 65-horsepower De La Vergne power.

O. Thomas is in charge of station construction, and E. L. Riley of connections. Jack Watkins is in charge of concrete and building foundations.

ALBERTA OIL REGULATION

EDMONTON, Alberta, June 9.—A new amendment has been made to the oil and gas regulations of the province of Alberta under which the officials of the petroleum and natural gas branch of the provincial lands and mines department are empowered when deemed advisable to seal valves and meters used in connection with producing wells, pipe lines or tanks. Penalties are provided for removal of the official seals except in cases of emergency. The regulation is designed to strengthen the department's control over oil and gas operations in order to promote efficient production and minimize waste.

DEATH OF PHELPS BROWN

Phelps Brown, president and treasurer of the Wico Electric Co., Springfield, Mass., died on June 1 as a result of injuries suffered the preceding day in an automobile accident on the Jacob's Ladder road in Massachusetts. Mr. Brown was 51 years old. Mrs. Brown was painfully injured but will recover. At the annual meeting of the Wico Electric Co. in February, E. L. Stoughton, vice president, formerly general sales manager, was elected manager of the company.

Vapor Pressure Wooden Tanks Used Extensively

(Continued from Page 14)

it was early found that the tight decks would not be tight long when exposed to the action of the sun's rays. The wood dried out and the edges between deck planks separated and the tank was no longer serving its proper function of retaining the vapor above the oil.

As the water seal had been used on steel tanks to lower interior temperatures it was not a difficult matter to apply the same general idea to the wooden tanks. The deck is crozed into the staves about 7 inches center below the upper end of the stave which will give a water seal about 6 inches deep when the deck is in place.

These decks are made of matched redwood and when the seal is filled with water it is certain that a tight deck is being maintained for leaks would quickly become evident and the water escape into the tank to mingle with the oil. It would also be made evident by the gas bubbling up through the water when the leak first started. But with the water kept in the seal the decks do not leak. Dirt will accumulate in the water seals and in some instances a light shiplap cover is laid over the top of the tank to form a protection against dust accumulating, also to reduce the rate of water evaporation from the seal.

On some leases the wooden tank batteries have been covered by the usual form of tank house or shed but this added precaution is not thought necessary for the usual lease battery, especially where the water seal is provided and properly used.

The life of redwood tanks used in other industries has been recorded as exceeding 50 years in some instances. In the oil industry it seems that some of the old wood tanks erected in the early part of this century will surpass this record if the lease owner does not come to realize that he is continuing to pay for these old "tubs" through loss of oil by evaporation at a rate that would certainly startle him if he realized the full extent of his loss. But based upon the theory that the oil is not his until the pipe line pays for it he has no gauge by which he can actually determine the total amount of oil his well has delivered into the tanks for the evaporated portion is not accounted for by any manner of reckoning under the normal field conditions.

Good wooden tanks have a definite place in the industry and one place is combating corrosion, or more properly put to prevent the corrosive elements produced by the well from coming in contact with material that will corrode. For this purpose it seems that the use of tight wooden tanks equipped with good fixtures to hold pressures will increase with continued use of steel tanks for other purposes.

Rusk Center of Hottest Play in Many Years

(Continued from Page 11)

back pressure valves), standing 5,000 pounds test on christmas tree, are now holding the well shut in. Two-inch upset tubing, manufactured by Jones & Laughlin, is the flow string in the hole. Macwhyte 1⅛-inch wire line was used and a Badgett lubricator and blowout preventor was installed to prevent any trouble.

Had to Build Road

Before the material and equipment could be trucked into the location, which is about 1 mile off the gravel highway, a corduroy or "Arkansas concrete" road had to be put down to prevent the trucks from hopelessly miring, which may give an idea of what is to be taken into consideration in drilling a well in the area.

Cranfill & Germany are now planning on spudding a test by June 17, on a tract located approximately one-half mile east of Rusk, or about 7 miles northeast of the discovery well. However, before they start operations they are checking the location of the old town of New Birmingham that was founded in 1890 by the syndicate organized to prospect for and manufacture iron in the furnace they built just west of the town of Rusk. The old town was eradicated about 50 years ago when the project fell through, but the operators hesitate on starting the second test for the area for fear they may locate it on one of the old town lots and heirs of the former owners may give a lot of trouble if that happened.

If this test proves a producer, geologists and others will no doubt accede to the belief that this is another shore line, similar to the East Texas shore line of the East Texas Field which is located about 27 miles to the northeast and about 1,500 feet updip. This newly opened area is considered just as the East Texas Field was first considered, "that there is no reason for oil being there, that it is too far out in the basin, but nevertheless the oil is there."

The structure or shore line of the area was core drilled by Shell Petroleum Corp. and the Amerada Petroleum Corp. It was also "shot" with instruments, and the Humble Oil & Refining Co. is again "shooting" the area for further information.

Companies that have been busy buying in the area, and playing a trend from the well to the north and northeast through the town of Rusk, are the Sinclair Prairie Oil Co., Texas Co., Sun Oil Co., Humble Oil & Refining Co., Magnolia Petroleum Co., Lion Oil & Refining Co., Devonian Oil Co. and others, besides many individuals and partnerships. As soon as the well is tested and proves a good Woodbine sand well other major companies are expected to step in to augment the number already actively engaged in this work.

The Drilling Crews

The two drilling crews on the well are as follows: O. R. Hogue, driller; Pete Killingsworth, derrick man; T. R. Rowe, O. E. Moore, W. F. Youngblood, J. R. Shepherd, drillers; P. L. Bennett, fireman; W. A. Adams, derrick man; J. S. Shinn, Pierce Keys, R. J. Hixon, E. Ware, firemen; Doc Head, derrick man; Hugh Carmichael, E. Wilson and W. A. Clifton. They carried the hole down without trouble, and brought the well in without getting a spot of oil on the new derrick, which is something to marvel at on a wildcat discovery.

Roger Wolfe, contractor on the well, and a partner of Lloyd Long of Graham, Tex., has been in the drilling contracting business in the East Texas Field, having used this rig for drilling many holes in that field. He started in the industry in Young County shortly after the World War.

ROCKY MOUNTAIN RUNS

Estimated daily average production for the week ending June 9 follows:

WYOMING

	Bbls.
Salt Creek	17,890
Big Muddy	1,800
Badger Basin	40
Black Mountain	500
Byron	Shut in
Dallas Derby	600
Dutton Creek	80
Elk Basin	600
Ferris	20
Frannie	2,300
Garland	140
Grass Creek	1,390
Greybull	10
Hamilton Dome	780
Hudson	300
LaBarge	1,330
Lance Creek	310
Lost Soldier	1,830
Mule Creek	Shut in
Midway	80
Notches	Shut in
Oregon Basin	2,100
Osage	830
Pilot Butte	Shut in
Rex Lake	20
Rock River	1,660
South Casper	Shut in
Polson Spider	240
Teapot	30
Total Wyoming	34,880

MONTANA

Buckley-Border	310
Cat Creek	650
Cut Bank	2,030
Dry Creek	Shut in
Kevin-Sunburst	3,950
Lake Basin	50
Pondera	980
Total Montana	7,970

COLORADO

Florence	250
Ft. Collins & Wellington	510
Iles Dome	1,200
Moffatt	510
Orchard	90
Rangely	90
Tow Creek	210
Total Colorado	2,860

NEW MEXICO

Artesia	640
Cooper Area	80
Empire Area	None
Eunice Area	1,940
Getty Pool	None
Hobbs	36,750
Hogback	210
Hospah	Shut in
Jal	2,620
Lea Area	1,700
Jackson	1,450
Maljamar	250
Rattlesnake	710
Table Mesa	80
Total New Mexico	46,430
Total Rocky Mountain Area	92,140

Scene in Rusk, Texas, county seat of Cherokee County, where a new Woodbine sand discovery has been made. The corner shown may be called "headquarters" for the oil men in town, since there is no hotel of any size to accommodate the crowds, and the operators, lease brokers, farmers and others just congregate on the streets, especially on this corner

Death of John T. Dillon in New York Hospital

OIL CITY, Pa., June 9.—John T. Dillon, 74, mayor of Titusville from 1911 to 1915, died unexpectedly in the Doctors' Hospital, New York City, Monday morning.

Mr. Dillon's career began in 1897 when he founded the Titusville Forge Works. He conducted the business until 1916 when he sold it to the Bethlehem Steel

JOHN T. DILLON

Corp. In 1919 Mr. Dillon purchased the company from Bethlehem Steel and a few years later merged it with the Struthers-Wells Corp. Also in 1919, Mr. Dillon purchased the Titusville Iron Works, and served as its president until his retirement when his son, John T. Dillon, Jr., succeeded him as president.

At the time of his death he held directorships in the Struthers-Wells-Titusville Corp., Marien Trust Co., Buffalo, and Warren Ax Tool Co. He was also interested at one time in the Canadian Forest Co., Welland, Ontario.

CANADIAN GAS ASSOCIATION

MONTREAL, Quebec, June 9.—At the twenty-seventh annual meeting of the Canadian Gas Association held here, D. G. Munroe, retiring president, reported signs of improvement in the gas industry with increased output reported by many companies.

Papers of a technical nature were delivered by various speakers, including M. L. Kane of the Union Gas Co. of Chatham.

The officers elected for 1934-35 were: President, J. C. Dawson, Quebec; first vice president, John Keillor, Vancouver, British Columbia; second vice president, W. H. Munroe, Ottawa; secretary-treasurer, G. W. Allan, Toronto; executive committee, Arthur Hewitt, Toronto; J. M. H. Young, London; Hugh McNair, Winnipeg; V. S. McIntyre, Kitchener, Ontario; D. G. Munroe, Montreal; J. J. Humphreys, Montreal; K. L. Dawson, Halifax; and T. P. Pinckhard, Hamilton.

CARBON BLACK PLANT

CRAIGMYLE, Alberta, June 9.—The Pioneer Carbon Co., recently incorporated to operate a carbon black plant here, utilizing gas from shallow wells on the C. Ross Echlin farm, is reported to have commenced construction. The company has received propositions to handle the product from Great Britain, Holland, France, Australia and the United States.

VERMILLION GAS PROJECT

VERMILLION, Alberta, June 9.—A group of Vermillion citizens headed by Charles W. Robinson is planning to drill a test for gas in an effort to develop a supply for the town. Gas operations in the Lloydminster and Wainwright areas are being investigated.

Dilatory Tactics Stop Passage of Control Bill

(Continued from Page 9)

10 gallons of gasoline, it's almost all net gain.

"In addition to portable refineries, Mr. Glavis' agents have found a trick valve arrangement on some properties. To carry out proration enforcement, a metal bar about 10 inches long, commonly referred to as a key, is put into a valve to stop or check the flow of oil. This key has a T-shaped head. Some operators, by cutting the key in two near the top, let the 'T' part hang in the slot to make it appear that the key is in place—but there is no bottom to the key, so the valve is wide open. Other valves have been found which were only hulls, without any inside parts, and the whole thing, supposedly checking the flow of oil, but actually speeding it, bearing a seal of Texas Railroad Commission agents.

"Occasionally, pipe lines are run underground to the well and oil taken out there illegally before reaching the surface, while the legal allowable is being run from the mouth of the well.

"Unless we can have certain authority to inspect and check producing properties, which we seek in the proposed Disney-Thomas bill, we cannot find and destroy trick devices resorted to by hot oil operators to evade state and Federal restrictions."

Members of the industry from California, here to advance the new agreement which has been proposed for the Pacific Coast, will meet with Attorney General Cummings and Secretary Ickes the first of the week. Action on the proposed agreement is expected to be the result of this meeting and the delegation is optimistic as to the outcome. The conference with the attorney general is being arranged by Administrator Ickes.

Darrow's Report

Oil and the purported monopoly in oil will be the subject of a supplemental report which the Darrow's review board is expected to submit to the President within the next few days. The report is expected to deal at length with alleged price fixing within the industry.

The Darrow review board was appointed some time ago by President Roosevelt to investigate and report on the condition of the small business concerns under the National Recovery Administration codes. Extensive hearings were held on codes for several industries, and around May 1 the report was submitted to the President. That report covered eight industries, but did not deal with the petroleum code, although hearings on that code had been completed some time prior to the issuance of the report.

Need Still Urgent

A summary of the reasons why the recent decision of the U. S. Circuit Court of Appeals of the Fifth Circuit at New Orleans in the Amazon and Panama cases does not remove the urgent need for passage at this session of Congress of the pending Thomas-Disney Federal petroleum bill, was offered by Charles Fahy, acting chairman, Petroleum Administrative Board:

1. This decision does not sustain the power of the Federal Government to accomplish the restriction of the supply of crude petroleum to the amount needed to satisfy market requirements for consumption and export.

2. It does not sustain the power of the Federal Government to make a valid allocation of crude oil production for each of the various producing states.

3. No control over production whatsoever is given in any of the 15 oil producing states having no state regulatory commission.

4. In the three states having regulatory commissions, the decision merely authorizes the Federal Government to assist the state in enforcing its own proration order. These states may write proration orders permitting the production of amounts of crude petroleum far in excess of their requirements as recommended under the code. At least two of these three states are doing this at the present time.

5. Even if this decision had sustained all of the powers given to the Federal Government under the code and it had been finally affirmed by the Supreme Court, there would still be need for the passage of the Thomas-Disney bill. The code is a hastily prepared instrument containing many ambiguous provisions, and the penalties provided for its violation are inadequate. For example, the National Industrial Recovery Act provides a maximum penalty of $500 a day for the violation of a code. It is readily apparent that a hot oil producer can make a handsome profit by violating the production control provisions of the code so long as he is to be subjected only to a maximum fine of $500 a day. The ambiguous provisions and inadequate penalties contained in the code breed litigation, and render its enforcement extremely difficult.

6. This decision is not final. According to press reports, the attorneys have already announced that an appeal will be taken to the Supreme Court, and that in the meantime, pending appeal, an effort will be made to secure a stay of the judgment of the Circuit Court of Appeals.

Rules on Bonding

The Bureau of Internal Revenue, on Saturday, extended the time for filing bond under Section 603 (d) of the revenue act until June 30. This section requires the bonding of producers and importers of gasoline and producers and manufacturers of lubricating oil.

Progress on the regulations to cover the new sections of the act is going slowly. The definition of the phrase "commercially known or sold as gasoline" is the main stumbling block. It is understood that the definition will not include within its scope tractor fuel.

Producers of crude petroleum and those who purchase direct from the producer will be required to post a bond, unless exempt because the production is less than 5 bbls. a day per well. The bureau will require purchasers of crude oil to secure an affidavit from the producer that the wells on his lease do not produce on the average more than 5 bbls. per day. This it is understood will be computed by taking the production of the entire lease for a month and dividing it by the number of actual producing wells thereon and then determining the daily production. Where a purchasing company accepts such an affidavit in good faith and it is later proven to be false, the Federal authorities will proceed against the producer.

World's Deepest Test

View of General Petroleum Corp.'s No. 1 Berry in the South Belridge Field, Calif., now at a depth of 11,377 feet

Lower Cost Highways Chance for Asphalt

(Continued from Page 8)

it was usually used with a concrete base. The explanation or excuse for these expensive roadways was usually based on the contention that while initial costs were high they would last a generation with a minimum of maintenance. The limitations of this contention as regards permanency are now apparent in many sections of the country. Highways costing $30,000 or more per mile which were to last 30 to 50 years with no replacements and few repairs in many instances have crumbled away in 5 to 15 years with 100 per cent replacements required. Others have deteriorated to the point where they no longer are satisfactory for main highway travel and have been repaired in many cases with asphalt surface.

It is not the purpose of this article to discuss the relative merits of the main types of road construction. Any statement made as to the use of petroleum asphalts would probably be disputed as to accuracy by those selling competitive products. It is sufficient to state here that during the past three years impartial investigations have been made which show the strong position of cutback asphalts and road oils in all types of highway construction in any programs based on plans to secure the maximum service at a minimum cost over a period of years. While a few connected with the asphalt industry have conceded that concrete or some other type of material was more desirable for highways with the maximum travel, others in the industry can present convincing reports showing that asphalt has given satisfactory service at the lowest cost when used in the most traveled highways and streets of this country.

In this connection the "Report to the Associated Railroads of Pennsylvania," made last November by Prof. Charles B. Breed of the Massachusetts Institute of Technology, is of interest. In an exhaustive report on comparative costs he reached the following conclusion in regard to data on costs summarized in two tables accompanying the report:

"These values are the result of estimates made of typical roads based upon prices generally prevailing throughout the country. In some parts of the country these prices may be a little lower than those assumed and in some portions higher. The prices are the average prices prevailing in 1929-1930 and in 1931-1932. In another year they are likely to run higher. The change, however, does not alter the general picture because if cement pavements increase in cost so do bituminous pavements in substantially the same ratios so that the relation between the capital cost of these two payments is reliably shown in these tables. They indicate in general that bituminous roads suitable for passenger cars cost from one-third to two-thirds the cost of cement pavements required for trucks with comparable densities of traffic."

Secondary Highways

Aside from these highly traveled highways and streets the dominant competitive position of asphalt in the construction of low cost secondary roads is undisputed. As indicated in this discussion there is every reason to believe that in the future highway departments will give more and more attention to this type of construction. This is due to the fact that many of the main national highways have been completed and the next move is to tie in secondary roads to these main thoroughfares. It is in the construction of these roads costing from $1,000 to $10,000 per mile that petroleum asphalt no doubt will have its largest market in the future.

Those in touch with this market state that the oil companies have suffered in the past due largely to their own competitive practices. In their anxiety to sell asphalt material which a few companies apparently considered in the nature of a waste product, prices were cut to unprofitable levels. Others did not attempt to make a study of the material required for the various types of road construction and instances are cited in which they sold a customer a grade of cutback asphalt, asphalt emulsions or asphalt cements not suited to his requirements. Individual companies and the Asphalt Institute with main offices in New York City and a branch office in San Francisco have compiled exhaustive data regarding the specifications and application of asphalts and road oils covering all its important uses and the industry now has the necessary standardization to cope with any road construction program that is presented to the industry. The main thing needed at this time, according to those in a position to know, is for the industry to stop bickering and present a united front in securing a business to which it is justly entitled.

East Central Texas Wildcats

(Continued from Page 52)

FANNIN COUNTY

L. Kean et al's No. 1 L. M. Boyd, 900 ft. from E line and 200 ft. from N line of survey, W. Hunt Sur. .... Waiting on cmt. to set; T.D. 2,278 ft.

FRANKLIN COUNTY

Magnolia Petroleum Co.'s No. 1 A. P. Dupree, 330 ft. out of SE cor. of survey, 7 miles NE of Mt. Vernon, W. D. Tallifferro Sur. ..... Derrick.

FREESTONE COUNTY

Clyde Creighton's No. 1 Holly Bros., 854 ft. from W and center N and S lines of lease, A.B.&M. Sur. ..... S.D. 5,220 ft.

Gholson et al's No. 1 E. M. and C. H. Watson, 1,450 varas from N line and 1,150 varas from W line of survey, 6 miles NE of Fairfield, R. D. Price Sur. ..... Location.

Trinity Farm Co.'s No. 1 N. R. Stewart, 1,866 ft. SW from NE line and 933 ft. SE from NW line of 1,920-ac. tract, R. M. Williamson Sur. ..... Location.

GREGG COUNTY

E. A. Lamb's No. 1 Clements, 500 ft. from W line and 1,880 ft. from N line of survey, G. A. Thomason Sur. ..... Derrick.

Sparkman and Reusch's No. 1 E. E. Stone, 1,000 ft. from E line and 330 ft. from N line of survey, M. Alexander Sur. ..... Derrick.

HENDERSON COUNTY

Big Bad Wolf Oil Co.'s No. 1 McCreary, 1,800 ft. from W line and 330 ft. from S line of survey, 6 miles S of Malakoff, W. H. Irvin Sur. ..... Derrick.

Gulf Production Co.'s No. 1 H. T. Gilliam (George Collins), 660 ft. from S and W lines of 100-ac. tract, J. L. Scott Sur. ..... Drlg. 3,235 ft.

HOPKINS COUNTY

D. A. Hale et al's No. 1 L. M. Hall, 200 ft. from N and E lines of 70-ac. tract, 1 mile SE of Miller Grove, A. Caro Sur. ..... Location.

HUNT COUNTY

G. S. & S. Co.'s No. 1 Oscar Popper, 2,670 varas from S line and 810 varas from E line of survey, 5 miles NW of Greenville, James Moore Sur. ..... Location.

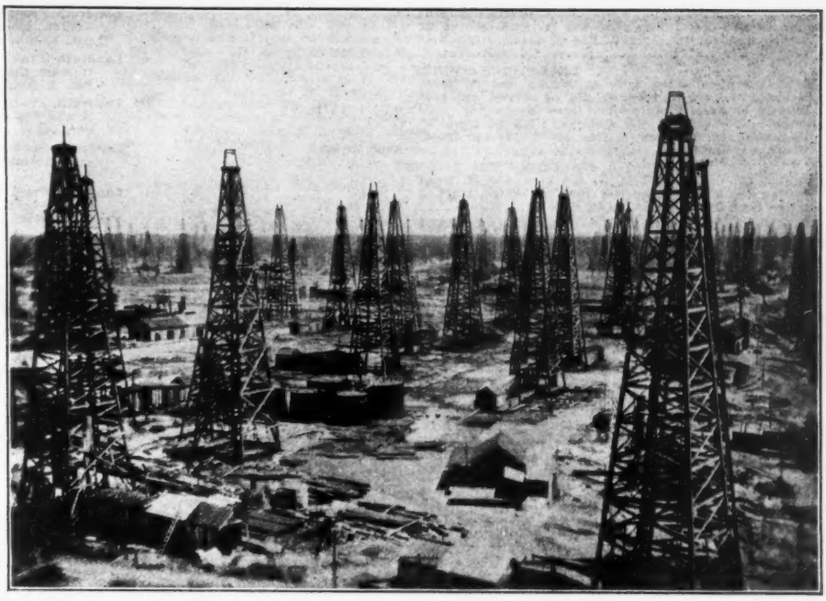
KAUFMAN COUNTY

W. J. Lewis et al's No. 1 D. Clark, 430 ft. from S line and 600 ft. from E line of survey, 6¼ miles NW of Elmo ..... S.D. 400 ft.

LAMAR COUNTY

Cole et al's (formerly Optometrist Oil Club) No. 1 J. M. McFaddin, 450 ft. from S and W lines of E 25-ac. tract, 10 miles NW of Paris, Joseph Dick Sur. ..... S.D. 2,506 ft.

MANHATTAN A. P. I. BELT



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MORRIS COUNTY

Simpson et al's No. 1 Staggers, 800 ft. from S line of survey and 150 ft. from W line of lease, J. B. Nelson Survey ..... S.D. 2,330 ft.

LIMESTONE COUNTY

C. M. Joiner et al's No. 1 S. A. Knobb, 900 ft. from N line and 1,000 ft. from W line of survey, one-half mile N of Falls County line, Luke Moore Sur. ..... S.D. 1,700 ft.

J. Rodgers et al's No. 1 Vol DeLone, 1,518 ft. from W line and 600 ft. from N line of W 100-ac. tract, Pedro Varela Sur. ..... Shut down.

NACOGDOCHES COUNTY

Livingston Oil Co.'s No. 1 C. B. Watkins, 150 ft. from N line and 330 ft. from NW lines of 160-ac. tract, 3 miles S of Caro, H. Y. Bailey Sur. ..... Drlg. 850 ft.

NAVARRO COUNTY

W. J. Keeling et al's No. 1 J. F. Rushing, 484 ft. from N line and 150 ft. from W line of 134-ac. tract, 6 miles SW of Richardson, Henry Ford Sur. ..... Derrick.

J. B. Stoddard et al's No. 1 C. S. West estate, 1,000 ft. from W line and 650 ft. from N line of 683-ac. tract, Mathew Boren Sur., Abstract No. A-86 ..... Rigging up.

McCullough et al's No. 1 C. Berry, 330 ft. from SE cor. of 35-ac. tract, 1 mile W of Dawson, William Moss Sur. ..... Set csg. 20 ft.

Wheelock and Collins' No. 1 I. N. Cerf, 375 ft. from N line of lease and 1,050 ft. from W line of lease, James Smith Sur. No. 726 ..... Rig up.

RAINES COUNTY

J. W. Hallsell et al's No. 1 P. F. Jones, 400 ft. out of SW cor. of 22-ac. tract, 2½ miles S of Alba, B.B. B.&C. Sur. ..... S.D. 2,100 ft.

RUSK COUNTY

Arnold and Shaw's No. 1 J. E. Arnold, 1,530 ft. from S line and 300 ft. from most southerly E line of survey, J. Crawford Sur. ..... Derrick.

George Hudson et al's No. 3 Jeff Phillips, 150 ft. from N line of survey and 700 ft. from W line of 100-ac. tract, 4 miles SE of Minden, N. Villaria Sur. .... S.D. 3,584 ft.

SMITH COUNTY

H. L. Hunt Production Co.'s No. 1 Henry Rayford, 330 ft. from E line and 200 ft. from N line of survey on 100-ac. tract, John L. Dillard Sur. ..... Abnd.

Preston Rose et al's No. 1 Elisha Wiggins, 2,300 ft. from W line and 330 ft. from S line of 640-ac. tract, 2 miles SW of Winona, F. H. K. Day Sur., Abstract No. 285 ..... Drlg. 1,220 ft.

UPSHUR COUNTY

Ben G. Barnett et al's No. 1 W. S. Jones, 200 ft. out of SW cor. of 100-ac. tract, 1½ miles NW of Jamestown, James N. Dunn Sur. ..... Drlg. 3,000 ft.

Virgil Hodges et al's No. 1 J. M. Floyd, 330 ft. from NE cor. of 126-ac. tract, 4 miles N of Gladewater, Railroad Sur. ..... S.D. 1,050 ft.

Lanier and Moore's No. 1 Vaughan, 230 ft. from S line and 330 ft. from W line of 100-ac. tract, 2 miles NW of Big Sandy, P. W. Standifer Sur. ..... Drlg. 1,200 ft.

Papadake et al's No. 1 L. L. Towery, 1,800 ft. N and 330 ft. E of SW cor. of survey, 5 miles N of Gladewater, W. L. Palmer Sur. ..... Coring 3,700 ft.

Randerson et al's No. 1 Nid Minor, 600 ft. from NW line and 1,800 ft. from NE line of tract, D. R. Cannon Sur. ..... Waiting on cmt. to set; T.D. 3,750 ft.

VAN ZANDT COUNTY

Germany et al's No. 1 C. S. Coker, 150 ft. out of SW cor. of 55-ac. tract, William Daniel Sur. ..... S.D. 1,208 ft.

Gillum and Allen et al's No. 1 A. T. Bass, 150 ft. from W. line and 150 ft. from N line of 10-ac. tract, William Hart Sur. ..... S.D. 3,660 ft.

Griffith Bros.' No. 1 Bruce, 1,000 ft. from S line and 330 ft. from E line of 124-ac. tract, G. Martinez Sur. ..... S.D. 1,542 ft.

Humble Oil & Refining Co.'s No. 3 S. R. Ray, 200 ft. N and 960 ft. W of SW cor. of Listenbee 30-ac. tract and on Ray 111.6-ac. tract, Nacogdoches County School Land Sur. ..... T.D. 1,257 ft.; showing oil.

Isaac et al's No. 1 C. F. Darrell, 330 ft. from S and W lines of 53-ac. tract, C. B. River Sur. ..... Drlg. 1,000 ft.

W. E. McKinney et al's No. 2 B. T. Davis, 285 ft. from N line and 235 ft. from W line of 13-ac. tract, J. Goodman Sur. ..... Testing 1,166 ft.

Miller et al's No. 1 J. M. Palmer, 150 ft. from S and E lines of 69-ac. tract, Nacogdoches County School Land Sur. ..... S.D. 94 ft.

Peden and Olson's No. 2 W. Bason, 600 ft. S of No. 2 and 140 ft. from W line of tract, J. Goodman Sur. ..... Location.

Pure Oil Co.'s No. 2 Ray, 250 ft. N of S line and 183 ft. W of E line of tract, Nacogdoches County School Land Sur, elev. 449.7 ft. ..... S.D. 1,215 ft.

Pure Oil Co.'s No. 9 W. T. Jarman, 1,576 feet N of S line and 250 ft. E of W line of W. T. Jarman 152.8-ac. tract, Nacogdoches School Land Sur. .... Running csg.; T.D. 2,793 ft.

Mrs. W. O. Smith et al's No. 1 Campbell, 1,700 ft. from N line and 300 ft. from E line of N. S. Bratcher Sur. ..... Set surface csg. 210 ft.

Wheeler et al's No. 1 Cade, 150 ft. from S line and 150 ft. from E line of 20-ac. tract, Nacogdoches County School Land Sur. ..... S.D. 240 ft.

Peden and Olsen's No. 1 J. M. Palmer, 200 ft. from E and N lines of south 2 acres of 94-ac. tract, Nacogdoches County School Land Sur. ..... Drlg. 1,200 ft.

WOOD COUNTY

Cauble and Thompson's No. 1-A N. G. Bobbett, 900 ft. from S line and 330 ft. from W line of tract, 2½ miles NW of Mineola, Daniel Fuller Sur. ..... S.D. 5,554 ft.

McElreath and Suggett's No. 1 B. D. Holley, 466 ft. from S and W lines of Holly tract, 8 miles SW of Winnsboro, James M. Moore Sur. ..... T.D. 4,438 ft.

Alex Snyder et al's No. 1 T. Holmes, 200 ft. out of NE cor. of 122-ac. tract, 1½ miles SE of Hawkins, A. N. McKnight Sur. No. 399 ..... Rig up.

Wildcat Operations in West Texas

(Continued from Page 50)

DAWSON COUNTY

Ray Albaugh et al's No. 1 John Robinson, 1,320 ft. from N line, 1,320 ft. from W line of Sec. 46, Blk. M, E.L.&R.R. Sur. ..... S.D. 2,625 ft.

ECTOR COUNTY

Atlantic Oil & Prod. Co.'s No. 2 Holt, 660 ft. from N line and 1,980 ft. from E line of Sec. 19, Blk. A, P.S.L. Sur. ..... Location.

Continental Oil Co.'s No. 2 O. B. Holt, 1,980 ft. from S line and 1,980 ft. from W line of Sec. 20, Blk. A, P.S.L. Sur. ..... Rig up.

C. J. Davidson et al's No. 1 Cole, 660 ft. from N line and 660 ft. from W line of Sec. 16, Blk. 45, Twp. 1s, T.&P. Sur. ..... Drlg. 4,203 ft.; showing gas.

Harrison et al's No. 2 Addia, 990 ft. from N line and 2,200 ft. from W line of Sec 35, Blk. 43, Twp. 2s, T.&P. Sur. ..... S.D. 3,836 ft.

Harrison et al's No. 3 Addia, 1,650 ft. from N line and 2,200 ft. from W line of Sec. 35, Blk. 43, Twp. 2s, T.&P. Sur. ..... Location.

Landreth Prod. Co.'s No. 2-A Texas Pacific Land Trust, 441 ft. from N line and 440 ft. from W line of Sec. 3, Blk. 43, Twp. 1s, T.&P. Sur. ..... Rig up.

Landreth Prod. Co.'s No. 1-B T. P. Land Trust, 2,200 ft from the S line and 440 ft. from the W line of Sec. 3, Blk. 43, Twp. 1s, T.&P. Sur. ..... Drlg. 3,603 ft.

Landreth Prod. Co.'s No. 1-C T.P. Land Trust, 440 ft. N and 440 ft. W of Sec. 11, Blk. 43, Twp. 1s, T.&P. Sur. ..... Location.

Landreth Prod. Co.'s No. 2 O. B. Holt, 660 ft. from S and E lines of Sec. 15, Blk. 43, Twp. 1s, T.&P. Sur. ..... Rig up.

Landreth Prod. Co.'s No. 1 Clarence Scharbauer, 660 ft. from S and E lines of Sec. 20, Blk. 44, Twp. 1s., T.&P. Sur. ..... Drlg. 695 ft.

Landreth Prod. Co.'s No. 1 O. B. Holt, 1,980 ft. from S line and 660 ft. from E line of Sec. 19, Blk. A, P.S.L. Sur. ..... Drlg. 2,150 ft.

Landreth Prod. Co.'s No. 1 T. P. Land Trust Co., 440 ft. from N line and 2,200 ft. from W line of Sec. 3, Blk. 43, Twp. 1s, T.&P. Sur. ..... Drlg. 4,239 ft.; flowed 530 bbls.

McCurdy et al's No. 1 Foster, 330 ft. from S line and 440 ft. from W line of Sec. 36, Blk. 43, Twp. 2s, T.&P. Sur. ..... Hole full of oil, showing water; T.D. 4,285 ft.

Moran Drlg. Co.'s No. 1 Smith, 330 ft. from N line, 330 ft. from W line of Sec. 12, Blk. 43, Twp. 1s, T.&P. Sur. ..... S.D. 4,425 ft.

Stanolind Oil & Gas Co.'s No. 6 J. M. Cowden, 660 ft. from N and 660 ft. W of the SE cor. of Sec. 27, Blk. 43, Twp. 1n, T.&P. Sur. ..... Drlg. 4,100 ft.

Shell Pet. Corp.'s No. 2 Jones, 660 ft. from S line and 1,980 ft. from E line, Sec. 6, Blk. 44, Twp. 3s, T.&P. Sur. ..... Flowing by heads; to treat with acid; T.D. 3,689 ft.

Skelly Oil Co.'s No. 1 Connell, 1,650 ft. from N line and 440 ft. from E line of Sec. 11, Blk. 16, P.S.L. Sur. ..... Drlg. 2,600 ft.

Texas Co.'s No. 10 W. E. Connell, 2,310 ft. from E line and 330 ft. from the S line of Sec. 1, Blk. B-16, P.S.L. Sur. ..... Rig up.

Fred Turner's No. 2-A Addia, 2,310 ft. from N and 440 ft. from E of Sec. 35, Blk. 43, Twp. 2s, T.&P. Sur. ... Cellar.

York-Harper et al's No. 1 Bates, 660 ft. from N and 660 ft. from E, Sec. 38, Blk. 44, Twp. 2s, T.&P. Sur.. Drlg. 1,340 ft.

EDWARDS COUNTY

O. Houseman's No. 1 Turney, 1,650 ft. from N line and 330 ft. from W line of Sec. 176, C.C.S.D.& R.G.N.G. Sur. ..... Fishing 165 ft.

H. E. Sides' No. 1 Turney, 1,650 ft. from N line and 330 ft. from W line of Sec. 176, C.C.S.D.&R.G.N.G. Sur. ..... Drlg. 520 ft.

FISHER COUNTY

E. T. Campbell et al's No. 1 W. R. Bishop, 570 ft. from S and 150 ft. from E of NW cor. of Sec. 18, Blk. 21, T.&P. Sur. ..... Moving in.

Condor Pet. Co.'s No. 1 Herring, 460 ft. from S and 330 ft. from W line of Sec. 192, Blk. 1, B.B.B.&C. Sur. ..... T.D. 3,110 ft.; plugged back to 3,106 ft.; will treat with acid.

Condor Pet. Co.'s No. 2 Wilson, 640 ft. from N and 2,310 ft. from W line of Sec. 6, Blk. R, W. E. Richardson Sur. ..... Rig up.

Stanolind Oil & Gas Co.'s No. 5 Steele, 1,170 ft. from S and 990 ft. from W line of Sec. 210, Blk. 1, B.B.B.&C. Sur. ..... T.D. 3,180 ft.; 130 ft. of oil and 160 ft. of S.W. on 12-hr. test.

Texas Co.'s No. 2-B Teagarden, 990 ft. from S and 330 ft. E of NW cor. of S half of Sec. 9, Blk. 8, W. E. Richardson Sur. ..... Material on ground.

Texas Co.'s No. 1 First National Bank of Rotan, 330 ft. N and E of the NW cor. of Sec. 210, B.B.B.&C. Sur. ..... T.D. 875 ft.; plugged back to 655 ft.

GLASSCOCK COUNTY

Steve Currie et al's No. 1 Turner, 330 ft. from N line and 330 ft. from E line of Sec. 19, Blk. 33, Twp. 2s, T.&P. Sur. ..... Waiting on cmt. to set 2,085 ft.

Steve Currie et al's No. 1 Underwood, 660 ft. from N line and 660 ft. from E line of Sec. 24, Blk. 3, Twp. 4s, T.&P. Sur. ..... Location.

Empire Gas & Fuel Co.'s No. 3 G. T. Hall, 330 ft. from the N line and 990 ft. from the W line of Sec. 21, Blk. 33, Twp. 2s, T.&P. Sur. ..... Running csg. 2,060 ft.

John I. Moore et al's No. 1 J. S. McDowell, 1,980 ft. from N line and 660 ft. from E line of Sec. 32, Blk. 34, Twp. 2s, T.&P. Sur. ..... Rig up standard tools 2,193 ft.

Noble Drlg. Co.'s No. 2 W. P. Edwards, 330 ft. from the S line and 330 ft. from the W line of Sec. 17, Blk. 33, Twp. 2s, T.&P. Sur. ..... Drlg. 2,211 ft.

Simms Oil Co.'s No. 2 W. P. Edwards, 330 ft. from S and 990 ft. from E of Sec. 18, Blk. 33, Twp. 2s, T.&P. Sur. ..... Drlg. 2,140 ft.

Simms Pet. Co.'s No. 3 W. P. Edwards, 330 ft. from E line, 1,353 ft. from S line, Sec. 18, Blk. 33, Twp. 2s, T.&P. Sur. ..... Drlg. 1,580 ft.

Tribal Oil Co.'s No. 5 M. M. Edwards, 330 ft. from S line and 990 ft. from the W line of Sec. 16, Blk. 33, Twp. 2s, T.&P. Sur. ..... Drlg. 2,165 ft.

HOWARD COUNTY

Humble Oil & Ref. Co.'s No. 3 W. R. Settles, 1,650 ft. from W line and 330 ft. from the S line of Sec. 132, Blk. 29, W.&N.W. Sur. ..... Drlg. 2,350 ft.

Merrick & Lamb's No. 12 Chalk, 2,310 ft. from N line, 330 ft. from W line, Sec. 125, Blk. 29, W.&N.W. Sur.. Pulling pipe 1,502 ft.

California Oil Co.'s No. 1 A. M. Bell, 465 ft. from W line and 1,915 ft. from E line of Sec. 12, Blk. 30, Twp. 1s, T.&P. Sur. ..... Drlg. 360 ft.

California Oil Co.'s No. 1 Dodge, 1,915 ft. from E line and 465 ft. from S line of Sec. 1, Blk. 30, T.&P. Sur.. Rig up to spud.

Continental Oil Co.'s No. 3 Gilbreath, 330 ft. from N line and 660 ft. from E line of Sec. 24, Blk. 33, Twp. 2s, T.&P. Sur. ..... Prepare to shoot; T.D. 2,455 ft.

Continental Oil Co.'s No. 9 Settles, 330 ft. from N line and 990 ft. from W line of Sec. 133, Blk. 29, W.&N.W. Sur. ..... Set csg.; T.D. 175 ft.

Dorn et al's No. 1-B Davis, 2,310 ft. from N line and 2,310 ft. from W line of Sec. 2, Blk. 30, Twp. 1s, T.&P. Sur. ..... Drlg. 305 ft.

L. C. Harrison et al's No. 3 Texas Land & Mortgage Co., 2,310 ft. from E line and 330 ft. from the S line of Sec. 4, Blk. 30, Twp. 1s, T.&P. Sur. ..... Derrick.

Plymouth Oil Co.'s No. 11 Kloh, 1,320 ft. from S line and 660 ft. from W line of Sec. 5, Blk. 32, Twp. 2s, T.&P. Sur. ..... Underreaming 870 ft.

Permian Pacific Pet. Co.'s No. 1 Cappa, 330 ft. from SW cor. of Sec. 17, Blk. 29, Twp. 1s, T.&P. Sur.... Location.

Plymouth Oil Co.'s No. 10 Kloh, 660 ft. from S line and 660 ft. from W line of Sec. 5, Blk. 32, Twp. 2s, T.&P. Sur. ..... Rig up to pump; treated with acid; T.D. 2,367 ft.

Joe Rusk et al's No. 3 G. M. Dodge, 330 ft. from the N line, 330 ft. from the E line, Sec. 9, Blk. 30, Twp. 1s, T.&P. Sur. ..... Moving in machine.

Sinclair Prairie Oil Co.'s No. 12 Dodge, 330 ft. from S line and 2,360 ft. from W line, Sec. 11, Blk. 30, Twp. 1s, T.&P. Sur. ..... Running csg.: T.D. 1,398 ft.

Southern Oil Co.'s No. 1 Frazier, 660 ft. from S line and 660 ft. from W line of Sec. 4, Blk. 33, Twp. 10s, T.&P. Sur. ..... Drlg. 700 ft.

IRION COUNTY

S. E. Colgin's No. 1 Tankersley, 550 ft. from E of river and 150 ft. from S line of Sec. 722, H. J. Voelker Sur. ..... Spudded and S.D.

Melrose Oil Co.'s No. 1 J. D. Sugg, 1,700 ft. from the E line and 308 ft. from the S line of Sec. 25, Blk. 3, H.&T.C. Sur. ..... Spudded and S.D.

Williams-Short's No. 1 Gentry, 2,300 ft. from N line and 2,030 ft. from W line of Sec. 1, Blk. 3, H.&T.C. Sur... S.D. 865 ft.

JONES COUNTY

C. P. Campbell's No. 3 Herndon, 1,450 ft. from S line and 800 ft. from W line, Sec. 6, M.E.P.&P. Sur. ..... Swabbed 5 bbls. per hour; T.D. 2,497 ft.

Clifton ¾ Brazelton et al's No. 1 Cassey, 200 ft. from N and W lines of SE cor. of Sec. 15, Blk. 15, T.&P. Sur. ..... Drlg. 630 ft.

Elmer Close et al's No. 1 A. B. Faulks, 330 ft. from N line and 330 ft. from W line of Subdiv. No. 27, Henry Millard Sur. ..... Set csg.; T.D. 1,905 ft.

Guthrie & Lancaster's No. 1-B Campbell, 330 ft. from N and 2,276 ft. from E line of Sec. 15, Blk. 19, T.&P. Sur. ..... Drlg. 925 ft.

Southern Oil Corp.'s No. 3 Williams, 330 ft. from S and W line of Sec. 17, Blk. 19, T.&P. Sur. ..... Drlg. 1,275 ft.

LOVING COUNTY

R. L. Allen's No. 2 fee, 4,290 ft. from NE line, 990 ft. from SE line, Sec. 82, Blk. 33, H.&T.C. Sur. ..... Location.

R. L. Allen's No. 3 fee, 4,290 ft. from NE line, 990 ft. from NW line, Sec. 82, Blk. 33, H.&T.C. Sur. ..... Location.

R. L. Allen's No. 4 fee, 4,290 ft. from NE line, 330 ft. from NW line, Sec. 82, Blk. 33, H.&T.C. Sur. ..... Location.

The California Oil Co.'s No. 8 Reagan-McElvain, 330 ft. from NW and SW lines of Sec. 84, Blk. 1, W.&N.W. Sur. ..... Drlg. 3,100 ft.

Eppenauer Drlg. Co.'s No. 2 Hammill & Ellis, 410 ft. from NW and 796 ft. from NE lines of Sec. 2, Blk. 1, W.&N.W. Sur. ..... Cellar.

H. W. Martin's No. 4 Wheat Ramsey, 990 ft. from SE and SW lines of Sec. 83, Blk. 1, W.&N.W. Sur. ..... Fishing 1,575 ft.

Sinclair Prairie Oil Co.'s No. 2 Bell, 410 ft. from SE and 1,025 ft. from NE of Sec. 91, Blk. 1, W.&N.W. Sur. ..... T.D. 4,267 ft.; swabbing 180 bbls.

J. F. Slack's No. 1 Covey, 2,310 ft. from NE line and 330 ft. from SE line of Sec. 3, Blk. 2, W.&N.W. Sur... Drlg. 705 ft.

PECOS COUNTY

Mack T. Anderson's No. 1 McKenzie, 660 ft. from S line and 660 ft. from W line of Sec. 1, Blk. 804 ..... Drlg. 1,354 ft.; pumped 15 bbls. in 24 hrs.

California Oil Co.'s No. 7 Smith, Lease No. 1, 275 ft. from N and 1,094 ft. from E, Sec. 37, Blk. 194, G.C.&S.F. Sur. ..... Location.

Cardinal Oil Co.'s No. 17-E Tippett, 150 ft. from E line of W half and 730 ft. from N of No. 5-E, Sec. 40, Blk. 194, G.C.&S.F. Sur. ..... Waiting on orders; T.D. 481 ft.

Cardinal Oil Co.'s No. 21-E Tippett, 336 ft. from S and 631 ft. from W of C of Sec. 40, Blk. 194, G.C.&S.F. Sur. ..... Drlg. 150 ft.

Culberson Bros.'s No. 15-B Monroe, 725 ft. from N line and 1,380 ft. from E line of Sec. 39, Blk. 194, G.C.&S.F. Sur. ..... Location.

Humble Oil & Ref. Co.'s No. 1 White, Baker, 1,320 ft from N and E lines of Sec. 44, Blk. Z, T.C. Sur. ..... Drlg. 9,690 ft.

C. S. Messenger's No. 2 Rand Jones, 1,935 ft. from S line and 1,013 ft. from W line of Sec. 5, Blk. 9, H.&G.N. Sur. ..... Drlg. 91 ft.

Mid-Kansas Oil & Gas Co.'s No. 18 Smith-Taylor, 1,396 ft. from S line, 1,390 ft. from W line, Sec. 33, Blk. 194, G.C.&S.F. Sur. ..... Location.

Mid-Kansas Oil & Gas Co.'s No. 24 Smith-Taylor, 350 ft. W of S half of Turner Tract No. 1, Sec. 33, Blk. 194, G.C.&S.F. Sur. ..... Road.

Mid-Kansas Oil & Gas Co.'s No. 25 Smith-Taylor, 344 ft. W of SE cor. of S half of Turner Trace No. 1, Sec. 33 ..... S.D. 750 ft.

Mid-Kansas Oil & Gas Co.'s No. 26 Smith-Taylor, 395 ft. S and 344 ft. E of SE cor. of S half of Tract No. 1 ..... Cellar.

Mid-Kansas Oil & Gas Co.'s No. 1 Turner, 350 ft. from N line and 350 ft. from W line of Turner Sur. No. 1.. S.D. 590 ft.

Mid-Kansas Oil & Gas Co.'s No. 12-H Yates, 405 ft. S of N line of Sec. 33 and 344 ft. W of SE cor. of S half of Tract No. 1 ..... Location.

Mid-Kansas Oil & Gas Co.'s No. 13-H Yates, 405 ft. S of N line of Sec. 33 and 344 ft. E of SE cor. of S half of Tract No. 1 ..... Location.

Mid-Kansas Oil & Gas Co.'s No. 27 Smith-Taylor, 194 ft. from N and 865 ft. from E of Sec. 33, Blk. 194, G.C.&S.F. Sur. ..... Location.

Mid-Kansas Oil & Gas Co.'s 35-B Yates, 1,619 ft. from N and 159 ft. from W of Sec. 61, Blk. 1, I.&G.N. Sur. ..... Location.

Mid-Kansas Oil & Gas Co.'s No. 38-A Yates, 250 ft. E and 205 ft. S from the NE cor. of Turner Tract No. 3 in Sec. 34¼, I. G. Yates Sur. ..... Location.

Mid-Kansas Oil & Gas Co.'s No. 39-A Yates, 150 ft. N and 250 ft. W of the NW cor. of Turner tract No. 4, in Sec. 34¼, I. G. Yates Sur. ..... Cellar.

Mid-Kansas Oil & Gas Co.'s No. 40-A Yates, 344 ft. from E line and 395 ft. from N of SE cor. of S half of Turner Tract No. 1 ..... S.D. 680 ft.

Mid-Kansas Oil & Gas Co.'s No. 34-B Yates, 1,055 ft. from N line and 498 ft. from W line of Sec. 61, I.&G.N. Sur. ..... S.D. 1,107 ft.

Simms Pet. Co.'s No. 2 A. J. Devlin, 330 ft. from the N line and 330 ft. from the E line of the most easterly NE cor. of Sec. 2, John D. Duval Sur., Abst. No. 3,824 ..... Location.

Tex-Mex Pet. Co.'s No. 1 Netterville, 5,610 ft. from S and 330 ft. from W of Sec. 59, Blk. 8, H.&G.N. Sur... Drlg. 480 ft.

Trans-Texas Oil Co.'s No. 1 Caldwell, 330 ft. from E line and 330 ft. from S line of Sec. 27, Blk. 40, Twp. 9, T.&P. Sur. ..... S.D. 340 ft.

REAGAN COUNTY

Big Lake Oil Co.'s No. 15-C University, Sec. 13, Blk. 2... Fishing 2,353 ft.

E. P. Kirschner and White's No. 1 W. A. White and McIntosh, 720 ft. from E and 500 ft. from N of Sec. 1,223, E.L.R.R. Sur. ..... Drlg. 3,106 ft.

REEVES COUNTY

Grisham-Hunter Corp.'s No. 1 fee, 1,320 ft. from N line, 1,320 ft. from the E line of Sec. 10, Blk. 50, Twp. 8, T.&P. Sur. ..... Drlg. 3,820 ft.

Hugo Precis' No. 1 B. Greenman, 330 ft. from NE line and 231 ft. from SE line of Sec. 21, Blk. 2, H.&G.N. Sur. ..... Shot 220 qts. from 3,778-3,980 ft.; no results; S.D.; T.D. 3,985 ft.

C. H. Lockhart et al's No. 1 W. D. Johnson, 330 ft. from N line and 330 ft. from W line of Sec. 8, Blk. C-12, P.S.L. Sur. ..... Moving in material.

RUNNELS COUNTY

Agnew & Sons' No. 2 Fowler, 1,165 ft. from S and 150 ft. from W of NE cor. of Blk. 32, M. Travis Sur. .... S.D. 2,559 ft.

Agnew and Currie's No. 1 H. E. Wade, 1,640 ft. from N line and 330 ft. from E line of Sec. 34, Domingo Diaz Sur. No. 533 ..... Set surface csg.; T.D. 33 ft.

Anderson et al's No. 1 W. F. James, 330 ft. from N and W lines of Subdiv. No. 30, Norvell Travis Sur. ..... Spudded and S.D.

Castor & Anderson et al's No. 1 W. F. James, 174 ft. from W line of Subd. No. 30, Norvell Travis Sur. No. 533 ..... S.D. 910 ft.

Melrose Oil Co.'s No. 1 L. P. Woods, 150 ft. from NE lines and 3,475 ft. from W line of survey, Willett Holmes Sur. No. 100 ..... T.D. 1,429 ft.

W. S. Sawyer et al's No. 1 Giesecke, 1,211 ft. from N and 4,606 ft. from E lines of survey, Blk. 131, James Hughes Sur. ..... Fishing for tools; T.D. 2,033 ft.; est. 1,500,000 ft. of gas with spray of oil from 2,029-33 ft.

Prairie Oil & Gas Co.'s No. 1 T. B. Wade, 2,597 ft. from N and 2,140 ft. from E line of Subdiv. No. 10, Norvel Travis Sur. ..... S.D. 2,335 ft.

R. Tucker et al's No. 5 McMillan, 250 ft. from N and W lines of that part of Subd. No. 22 in the D. Diaz Sur. ..... Underreaming 2,235 ft.

F. D. Williams' No. 1 J. L. Elkins, 2,325 ft. from E and 1,300 ft. N of SW cor. of Blk. 12, but in Blk. 13, N. Travis Sur. No. 533 ..... S.D. 1,400 ft.

SCHLEICHER COUNTY

John M. Cooper et al's No. 1 Bert Page, 1,290 ft. from N line, 1,470 ft. from W line of Sec. 40, Blk. L, G.H.&S.A. Sur. (old well being drilled deeper) ..... S.D. 5,404 ft.; spraying distillate.

TERRELL COUNTY

W. A. Sudderth's No. 1 Phelps, 2,157 ft. from N line and 2,432 ft. from the W line of Sec. 5, Blk. 4-A, G. W. Turley Sur. ..... S.D. 5,635 ft.

UPTON COUNTY

Broderick & Calvert's No. 1 Homer Trus. & Savings Bank, 1,980 ft. from N line, 660 ft. from W line, Sec. 22, Blk. B-42, Twp. 4s, T.&P. Sur. ..... Bldg. rig.

Gulf Prod. Co.'s No. 103 McElroy, 1,980 ft. from S and 660 ft. from W. Sec. 197, Blk. F, C.C.S.D.&R.G.N.G. Sur. ..... Drlg. 10,279 ft.

Texas Pacific Coal & Oil Co.'s No. 3-D J. F. Land, 990 ft. from S line and 990 ft. from W line of Sec. 36, Blk. 1, M.K.&T. Sur. ..... Spudding.

Theabotal Oil Co.'s No. 2 J. F. Lane, 1,650 ft. from N and 990 ft. from E of Sec. 36, Blk. 1, M.K.&T. Sur. ..... Prepare to run csg. 320 ft.

Williams & Williams Drlg. Co.'s No. 1 Robbins, 1,600 ft. from S and 1,900 ft. from E, Sec. 4, G.C.&S.F. Sur.... S.D. 2,027 ft.

VAL VERDE COUNTY

South-Western Exploration Co.'s No. 1 E. K. Fawcett, 2,310 ft. from S and 2,310 ft. from E, Sec. 14, Blk. L, G.C.&S.F. Sur. ..... Rig up.

WARD COUNTY

Atlantic Oil & Prod. Co.'s No. 3 Barrow, 2,310 ft. from NE line and 990 ft. from NW line of Sec. 23, Blk. 5, H.&T.C. Sur. ..... Rig up.

Alexander's No. 1 Richter, 1,650 ft. from NW, 1,170 ft. from NE line of Sec. 27, Blk. 34, H.&T.C. Sur. ..... Drlg. 1,533 ft.

Atlantic Oil & Prod. Co.'s No. 18 W. D. Johnson, 1,650 ft. from the NE line of Sec. 9, Blk. 34, H.&T.C. Sur... Prepare to test; T.D., 2,535 ft.

L. G. Bradstreet et al's No. 1 Lee Monroe, 2,310 ft. from NE and 330 ft. from SE lines of Sec. 77, Blk. 34, H.&T.C. Sur. ..... S.D. 1,037 ft.

California Oil Co.'s No. 3 D. Durgin, 1,650 ft. from SW line, 2,310 ft. from SE lines of Sec. 15, H.&T.C. Sur... Drlg. 2,170 ft.

California Oil Co.'s No. 8 York, 990 ft. from N and 2,310 ft. from SW of Sec. 10, Blk. 34, H.&T.C. Sur... Drlg. 2,200 ft.

C. C. Duffey et al's No. 1 Llano-Sloan, 1,650 ft. from NW and NE lines of Sec. 24, H.&T.C. Sur. ..... Drlg. 2,132 ft.

Farrell & Co.'s No. 3 John B. Bennett, 1,650 ft. from SE line, 330 ft. from NE line of Sec. 16, Blk. 34, H.&T.C. Sur. ..... Spudding.

Gulf Prod. Co.'s No. 30 Hutchins, 990 ft. from S line and 330 ft. from W line of Sec. 4, Blk. F, G.M.M. B.&A. Sur. ..... Drlg. 130 ft.

Gulf Prod. Co.'s No. 46 O'Brien, 1,650 ft. from S line and 990 ft. from E line of Sec. 17, Blk. F, G.M.M. B.&A. Sur. ..... Drlg. 2,668 ft.

Gulf Prod. Co.'s No. 47 O'Brien, 330 ft. from E and 990 ft. from S. Sec. 17, Blk. F, G.M.M.B.&A. Sur. ..... Drlg. 485 ft.

Gulf Prod. Co.'s No. 48 O'Brien, 990 ft. from E line and 990 ft. from S line of Sec. 17, Blk. F, G.M.M.B.&A. Sur. ..... Moving in.

Humble Oil & Ref. Co.'s No. 3 Richter, 2,316 ft. from NE line and 1,695 ft. from SE line of Sec. 27, Blk. 34, H.&T.C. Sur. ..... Drlg. 2,530 ft.; showing oil and gas.

Rector Oil Co.'s No. 1 Lee Monroe, 660 ft. from NE and 660 ft. from SE of Sec. 62, Blk. 33, H.&T.C. Sur... S.D. 4,661 ft.

Richardson's No. 1 Johnson, 330 ft. from NE line and 2,310 ft. from NW line of Sec. 32, Blk. 34, H.&T.C. Sur. ..... Prepare to test; T.D. 2,548 ft.

Sid Richardson's No. 1 Lee Monroe, beginning at the NE cor. of J. W. Hollingsworth Sur. No. 4, thence 440 ft. SE, thence NE 420 ft., J. W. Jackson Sur. No. 55 ..... Derrick.

Sinclair Prairie Oil Co.'s No. 5 Archenhold, 2,310 ft. from SE and 2,310 ft. from SW of Sec. 33, Blk. 5, H.&T.C. Sur. ..... Drlg. 2,625 ft.

Tex-Mex Pet. Corp.'s No.2-B Shell-Sloan, 2,310 ft. from NE and 990 ft. from NW, Sec. 16, Blk. 5, H.&T.C. Sur. ..... Drlg. 745 ft.

Tex-Mex Oil Co.'s No. 3-B Shell-Sloan, 1,650 ft. from NE and 330 ft. from NW lines of Sec. 16, Blk. 5, H.&T.C. Sur. ..... Drlg. 2,835 ft.

Westex Oil Co.'s No. 1 Cynthia Monroe et al, 330 ft. from SE and 330 ft. from SW lines of NE 80 acres of Sec. 2, J. V. Borders Sur. ..... Set csg.; tested 600 ft. of oil in 15 min.; T.D. 2,509 ft.

WINKLER COUNTY

Magnolia Pet. Co.'s No. 5 Scarborough, 1,650 ft. from N line and 370 ft. from E line of Sec. 18, Blk. 74, P.S.L. Sur. ..... Flowed 771 bbls. of oil in 24 hrs.; T.D. 2,843 ft.

McCurdy & Easter's No. 1 Scarborough, 1,650 ft. from W and 2,310 ft. from S, Sec. 1, Blk. 77, P.S.L. Sur.... Drlg. 2,795 ft.

Magnolia Pet. Co.'s No. 6 Scarborough, 1,650 ft. from S line and 330 ft. from W line of Sec. 4, Blk. 22-C, P.S.L. Sur. ..... Rig up.

Magnolia Pet. Co.'s No. 7 Scarborough, 1,650 ft. from N line and 990 ft. from E line of Sec. 18, Blk. 7, P.S.L. Sur. ..... Cellar.

Sid Richardson's No. 5-A Scarborough, 330 ft. from W and 190 ft. from S. Sec. 1, Blk. 22-C, P.S.L. Sur. ..... Moving in machine.

Richardson's No. 4 Scarborough, 330 ft. from N line and 2,310 ft. from W line of Sec. 1, Blk. 77, P.S.L. Sur... Bailing; T.D. 3,025 ft.

Richardson's No. 6 Scarborough, 330 ft. from N line and 2,310 ft. from W line. Sec. 18, Blk. 174, P.S.L. Sur. .. Rig.

Richardson's No. 5 Scarborough, 150 ft. from S line and 1,740 ft. from W line of Sec 1, Blk. C-22, P.S.L. Sur. ..... Waiting on cmt. to set; T.D. 2,570 ft.

Sinclair Prairie Oil Co.'s No. 2-C Sta'e-Scarborough, 102 ft. N and 1,650 ft. W of NE cor. of Sec. 1, Blk. 77, P.S.L. Sur. ..... Shut in; T.D. 3,027 ft.

Sinclair Prairie Oil Co.'s No. 3 W. F. Scarborough, 102 ft. from the N line, 1,650 ft. from E line, Sec. 1, Blk. 77, P.S.L. Sur. ..... Rig up.

Tide Water Oil Co.'s No. 2 Scarborough, 105 ft. from S line and 990 ft. from E line of Sec. 1, Blk. C-22, P.S.L. Sur. ..... To run tubing; flowing 65 bbls. per day; T.D. 3,016 ft.

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Wildcat Operations in Southwest Texas

(Continued from Page 49)

R. A. Davids' No. 1 Baptist Church, center of 3-ac. church lot, or 150 ft. E of N line of Pullin est., 27-ac. tract in F. Lewis Sur. ..... Location.
Dirk Bros.' No. 1 Skinner-Harrison, 160 ft. from N and 990 ft. from W line in NW Section 10 of Ragley Subd. of Chittim Ranch, 1⅛ mi. from Tuleta ..... Drlg. 3,973 ft.; top sand 3,950-62 ft.
Heep Oil Co.'s No. 1 J. C. Wood, 466 ft. from N and E lines of F. Crane Sur. ..... T.D. 4,717 ft.; P.B. 4,201 ft.
Houston Oil Co.'s No. 1 Miller ..... Drlg. sand 3,175 ft.; top sand 3,-020 ft.; S.W. 3,103-05 ft.
Houston Oil Co.'s No. 1 Neihaus, 660 ft. W of Magnolia's No. 1 Scarborough ..... Set 10-in. csg. at 425 ft.
Houston Oil Co.'s No. 1-B Neihaus, 330 ft. from N and E line of 100-ac. tract ..... T.D. 3,644 ft.; comp. 477 bbls. in 24 hrs.
Hibert Jeanes' No. 1 G. L. Courtney, 1,600 ft. from E line, 330 ft. from S line of tract, G. A. Kerr Sur., 1¼ miles NE of Pettus ..... Rigging up.
McLain et al's No. 2 Laura Weiss, B.&B. Sur., 660 ft. E of No. 1 ..... T.D. 100 ft.; prep. to start up.
Phillips Pet. Co.'s No. 1 Morgan, 4,950 ft. from W, 3,270 ft. from N lines of 13,930-ac. tract, Eyles Sur. ..... T.D. 6,090 ft.; Schlumberger showed 3 shows between 4,200 and 4,600 ft.

BELL COUNTY

Gus Winston et al's No. 3 Warrick, 100 ft. N of James Scroggins' No. 1 Warrick, in Elijah Ingram Sur. ..... Drlg. blue shale 3,580 ft.

BEXAR COUNTY

Joe Beckley's No. 1 fee, 3,100 ft. W and 150 ft. S at right angles from most northerly cor. of Morales Sur. (2 mi. SW of San Antonio) ..... Lime 1,270 ft.; S.D.
A. M. Blume's No. 1 H. A. Ridder, E offset to Blume's No. 2 Ridder, J. M. Barrera Sur. ..... Derrick blew down.
A. M. Blume's No. 2 Louis Ridder, approximately 2,350 ft. N of R.R., 700 ft. E of W line of J. M. Baerera Sur. No. 58 ..... T.D. 1,630 ft.; P.B. to test 1,430 ft.; W.O.C.
J. G. Bowles' No. 1 Dillon, 750 ft. from road on E and 4,750 ft. from S line of survey, Manuel Delund Sur. ..... Spud and S.D.
Keiffer et al's No. 1 Ruiz, SE cor. of 82-ac. tract in F. Rowland Sur. No. 48 ..... T.D. 1,715 ft.; S.D.
Dingman & Russell's No. 1 R. J. Coffey, 1,228 ft. from SE line, 1,086 ft. from SW line of 420-acre tract in Rodriguez Sur. ..... T.D. 1,326 ft.; P.B. 1,017 ft.; S.D.
S. E. Gantt's No. 1 A. B. Stephen, 2,650 ft. from SW line, 740 ft. from SE line of P. W. Hays Sur. ..... T.D. 452 ft.; S.D.
Thos. Gorton's No. 1 Edward Jackel, 600 ft. from N line, 800 ft. from E line of tract in J. Ward Sur. ..... T.D. 500 ft.; S.D.
George L. O'Neill's No. 1 Neimann in Juan Montez Sur. No. 6 ..... T.D. 1,425 ft.; bailing.
J. W. Johnson's No. 1 Willow Springs, 150 ft. from N and W lines of lease in B. Munoz Sur. No. 151 ..... T.D. 1,940 ft.; S.D.; made salt wtr. and some oil.
Fred A. Perrenot's No. 1 Russell, 750 varas from NE line, 54 varas from NW line of 500-ac. tract in Rodriguez Sur. ..... T.D. 1,315 ft.; standing.
Schneider & Reese's No. 1 Claussen ..... S.D. 1,675 ft.
A. Smith's No. 1 Henry Lamb, 750 ft. from N and E lines of Lamb farm, in de la Garza grant ..... T.D. 982 ft.; show of oil and gas from 968-82 ft.; W.O.C.
Trawalter Oil Co.'s No. 2 fee, Jett Sur. ..... T.D. 1,650 ft.; S.D.

BURLESON COUNTY

Berry & Hayes' No. 1 C. W. Young, 150 ft. from SW line and 780 ft. from SE line of 140-ac. tract in Bird Sur. (7 mi. SE of Caldwell) ..... T.D. 309 ft.; S.D.

CALDWELL COUNTY

S. S. Cargill's No. 2 Dameresu, 150 ft. from W line, 450 ft. from N line of D. Cooper Sur. ..... Top Edwards 2,260 ft.; show oil; reaming 2,262 ft.
F. H. Etheridge et al's No. 1 Perry, 300 ft. from SE line and 300 ft. from NE line of 27-ac. lease in P. Martinez Sur. (N of Lytton Springs) ..... Rigging up and S.D.
Wilford Keen et al's No. 1 Wm. Ewalk, 150 ft. from E line and 150 ft. from N line of 136-ac. tract, or 3,650 ft. from N and 1,300 ft. from E lines of Jas. George Sur. (3½ mi. from Lockhart) ..... T.D. 2,228 ft.; S.D.
Hinton & Dodson's No. 1 Addie Smith, 750 ft. SW line, 1,750 ft. NW line of Sam Shupe Sur., 6 miles S of Lockhart ..... Drlg. shale 1,700 ft.
J. Edward Mills et al's No. 1 Emma Johnson, 1,650 ft. from N line and 4,250 ft. from W line of Jas. Pinchback Sur. (6 mi. SE of Lockhart) ..... Sand 2,111 ft.; slight show oil; treated with 1,000 gals. acid.
M. C. Moore's No. 1 Lackey, 440 ft. NW line, 150 ft. NE line of Lackey's 193.75-ac. tract, or 450 ft. NW line and 2,600 ft. NE line of Damon Sur. ..... 10-in. csg. at 40 ft.; W.O.C.
Morgan & Seagraves' No. 1 Blackwell, 862 ft. from creek on E line and 150 ft. S of Blackwell's 90-ac. tract in J. D. Rains Sur. ..... Location.

DEWITT COUNTY

Keystone Royalties' No. 1 L. T. Burns, 1,100 ft. from W and 600 ft. from S line of 303-ac. tract in L. G. Belcher Sur. ..... Drlg. 400 ft.
Slick-Urschel No. 4 Potter, 3,170 ft. from SE line of 591-acre tract, 990 ft. SE of No. 3 ..... Drlg. 4,215 ft.

DUVAL COUNTY

Beer & Lewis' No. 1 Peters, Sur. 27 ..... Spud.
Buffalo-Texas Drlg. Synd., Inc.'s No. 1 Escobar, 700 varas from W line, 1,000 varas from N line of 430-ac tract in Francisco grant ..... Drlg. 2,750 ft.
Dr. J. H. Butte et al's No. 1 Tom Graham, 1,122 ft. N line, 3,375 ft. W line, Sec. 572, E. line of county and N line of San Diego ..... Location.
Continental Oil Co.'s No. 2-A Clara, Driscoll Sevier, 3,675 ft. S and 1,000 ft. from E line of Sec. 448 ..... Location.
W. C. McBride's No. 1 Hagist, 330 from N and E lines of SE 80 ac. of Sec. 1 ..... Location.
J. R. B. Moore's No. 1 W. R. Peters, Survey 36 ..... Rigging up.
G. G. Mortimer's No. 1-B Peters, 330 ft. N and W lines of SW¼ of Sur. 196 ..... Drlg. 1,920 ft.; wtr. sand 1,801-12 ft.; 1,828-39 ft. sand; 100 ft. mud and oil.
O'Byrne & Jennings' No. 1 Benavides, 3,734 ft. from S cor. and 330 ft. from W line at right angles, Sur. 355 ..... Rigging up.
Sun Oil Co.'s No. 1 Moreno, 330 ft. from E line and 3,000 ft. from S line of NW cor. of H.&W. Sur. 537, in Sec. 540 (5 mi. S of San Diego) ..... Drlg. 3,925 ft.
Witherspoon et al's No. 1, Richardson Sur. No. 6 ..... T.D. 1,005 ft.; S.D.
Louis Yeager's No. 1 Yeager, 694 ft. from W line, 1,527 ft. from S line of Sur. No. 38 ..... T.D. 865 ft.; S.D.

EDWARDS COUNTY

Love and Evans' No. 1 Steve Brown, 660 ft. from N and E lines of Sec. 66, G.W.T.&P.R.R. Sur., 15 miles W of Rock Springs ..... S.D. 3,002 ft.

FRIO COUNTY

Amerada Pet. Co.'s No. 2 Halff & Oppenheimer, begin. at most easterly N cor. of John H. Gibson Sur. No. 16, thence SE along NE line of Sur. 2,100 ft., thence SW at right angles 800 ft. (4 mi. SW of Pearsall) ..... Drlg. 4,952 ft.

GILLESPIE COUNTY

Dorre et al's No. 3 Lindig ..... Drlg. shale 170 ft.
Powers et al's No. 2 Lindig, 12,700 ft. from S line, 1,333 ft. from W line of Maria Josephine Guerrera Sur. ..... Location.

GOLIAD COUNTY

Jim Kendricks & J. M. OByrne et al's No. 1 Runge State Bank, 330 ft. from NW line and 330 ft. from SW line of 142-acre tract ..... Rigging up.

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Wichita, Kansas

H. H. Weinert's No. 2 Gracy Smith, 660 ft. NE of No. 1, B.&B. Sur. ..... Rigging up.
Magnolia Pet. Co.'s No. 3 Porter, 660 ft. NW of Weinert's No. 1 Grady Smith ..... Spud.
Oceanic Pet. Co.'s No. 1 Fromme, 1,500 ft. S line, 1,200 ft. W line of 62-ac. tract in P. D. Dexter Sur., 10 miles N of Goliad ..... Location.
Slick-Urschell's No. 4 Poetter, 330 ft. from SE line and 3,170 SW line of Marshall Sur. ..... W.O.C. 354 ft.
Sun Oil Co.'s No. 1 Escarborough, 660 ft. SW of Weinert's No. 1 Smith ..... Spud.

GUADALUPE COUNTY

M. W. Eiser's No. 2 Wells, 1,700 ft. from S line, 200 ft. from W line of Blk. 3, Subd. 1, J. de la Baume Sur. ..... Location.
Adolph Seideman's No. 1 Seideman, 380 ft. from NE line, 470 ft. from NW line of Mrs. Adolph Seideman 147.5-ac. tract (Subd. 110) in Antonio Maria Esnaurrizer Sur. No. 11 ..... T.D. 2,955 ft.; abd.

HAYS COUNTY

J. C. Crowder's No. 1 Burnett, 2,370 ft. from E line, 1,400 ft. from N line of tract in J. Ingram Sur. ..... T.D. 430 ft.; set csg.; S.D.

HIDALGO COUNTY

D. D. Oil Co.'s No. 1 Mrs. L. George, 330 ft. from N and W lines of 40-ac. tract in Share 13, Porcion 41. Location.
Davis & Harrison's No. 1 Luis George, 300 ft. from S and 700 ft. from E lines of Tract 13, Porcion 41, Ancient Jurisdiction of Reynosa ..... Drlg. 2,705 ft.
Otto Woods' No. 1 John Lawrence, 530 ft. from W, 300 ft. from N line of Tract 274, Porcion 39, Ancient Jurisdiction of Reynosa ..... T.D. 1,320 ft.; S.D. for wtr.
Union Sulphur Co.'s No. 1 American Rio Grande L. & I. Co., 400 ft. S and W of NE cor. of Lot 229, Blk. 59 (½ mi. N of Mercedes) ..... Drlg. 5,790 ft.

JIM HOGG COUNTY

Sun Oil Co.'s No. 1-E Guerra & Son, 9,500 ft. N of county line along the E line of W 2,000-ac. tract and 660 ft. at R/A ..... Drlg. 2,150 ft.

JIM WELLS COUNTY

Plymouth Oil Co.'s No. 1 Cuero Cattle Co., 330 ft. from S and W lines of H.T.&B. Sur. No. 7, 2¼ miles W from Alfred ..... Rigging up.
Putnam and Bode's No. 1 McCarley, 600 ft. from SE line and 1,500 ft. from NE line of 300-ac. tract, Blk. A, of W. H. Bode Subdivision of Wallace D. Wade Ranch ..... Drlg. shale 4,125 ft.

KARNES COUNTY

R. E. Cexeaux et al's No. 1 Tom Campbell, 330 ft. S and E cor. of farm and survey, J. R. Backer Sur., 12½ miles SW of Falls City ..... Moving in rig.
Houston Oil Co.'s No. 1-A Niehaus, N offset to No. 1 Niehaus ..... Clearing location.
Otto Krouse et al's No. 1 Marge Ruckman, 120 ft. from W line, 500 ft. from N line of 642-acre tract in Musquez Sur., 7½ miles N and E of Kennedy ..... T.D. 2,503 ft.; S.D.
F. Lovering et al's No. 1 P. Goff, 2¾ miles NE of Kennedy in C. Martinez Sur. ..... Rigging up.
G. A. Ray's No. 2 Radford, 4 miles N of Pettus Field. Rigging up.
C. J. Webster's No. 1 J. H. Cannon, 1,140 ft. from N line, 250 ft. from E line of 80-ac. tract in Lambrano Sur. ..... T.D. 1,790 ft.; standing, may deepen to Yegua.
Martin's No. 1 Houston, Thomas Leople Sur. No. 761 .... Top black shale 1,038 ft.; T.D 1,985 ft.; to deepen.
A. P. Pierce's No. 1 Werner, in SW cor. of 40-ac. tract, 150 ft. from S and W lines of J. F. Torrey Sur. .... T.D. 993 ft.; standing.

KENDALL COUNTY

Pierce & Garvey's No. 2 D. Werner, 1,140 ft. E, 420 ft. S line of J. F. Perry Sur., 6½ miles N of Kendalia ..... Location.

KERR COUNTY

Edminston & Walker's No. 1 Whitworth, 1,160 ft. from S line and 1,333 ft. from E line of Sec. 1,439 of the H.E.&W.T. Sur. ..... Drlg. 160 ft.
Jeff Love and Eastland Oil Co.'s No. 5-E Jeff Love, 1,500 ft. SE of No. 1 and 1,580 ft. from SE cor. and 300 ft. from N line of Sec. 1,591 ..... Drlg. 800 ft.
G. F. Schreiner's No. 3 Love, 1,420 ft. from W line, 1,260 ft. from S line of Sur. No. 1,594 ..... Location.
Van Duyn & Moore's No. 1 Nowlin, 2,000 ft. from E line, 2,200 ft. from N line of Jas. R. Bettner Sur. No. 99 ..... T.D. 1,040 ft.; abd.

KLEBERG COUNTY

J. S. Brown's No. 1 Antone Dietz, Sec. 7, Hotch estate .. T.D. 2,845 ft.; S.D.
Harry Clark's No. 1 V. J. Kivlin, 360 ft. from E line, 400 ft. from S line of Sec. 39, Blk. 8, Kleberg Town & Improvement Co. Sur. ..... T.D. 2,350 ft.; D.S. test 2,315-19 ft.; four joints mud, oil and sand; S.D.

LASALLE COUNTY

G. O. Ball's No. 1 J. M. Martin, 330 ft. from S and W lines of Martin 485.6-ac. tract, Sur. 683 ..... Abandoned.

LEE COUNTY

Jas. E. Pederson's No. 1 Turner, David Hudson Sur. .... Drlg. 2,005 ft.
H. A. Sherlack's No. 1 Otto, 736 ft. from NW line, 1,310 ft. from NE line of 57.5-ac. tract in Thomas Morrow Sur. ..... T.D. 1,495 ft.; S.D.

LIVE OAK COUNTY

Holmes & Goodwin's No. 1 fee, 1,000 ft. from N line and 330 ft. from W line of 326-ac. tract in Brigada Haughty Sur. ..... T.D. 902 ft.; blew out wtr. and gas.
Houston Oil Co.'s No. 25 Cartwright, J. Sandman Sur. .... Drlg. shale 1,500 ft.
Parsons & Smith's No. 1 Gomillion, 1,660 ft. W line, 160 ft. N line of tract No. 21, on N line and S line of survey, E. Jordan and I. D. Ammons Sur. .. Drlg. shale 751 ft.
Witherspoon Oil Co.'s No. 2 H. Clements, 100 ft. S of No. 1 junked hole, Eliz. Jordan Sur. ..... Cemented 7-in. csg. at 515 ft.; W.O.C.
Witherspoon Oil Co.'s No. 1 Draper, 330 ft. E line, 660 ft. S line of A. J. Sparks Sur. No. 251 ..... T.D. 1,200 ft.; abd.
Ike Taylor's No. 2 Griffith, 1,200 ft. from E line and 1,151 ft. from S line of lease in Tract 5, D. Osborne Sur. ..... Rigging up.

MAVERICK COUNTY

Stroman & Wright's No. 2 Debona, 440 varas E line, 280 varas S line of Sur. No. 1 ..... Drlg. 153 ft.
Ollie Wright's No. 1 L. Little, 500 ft. from N line, 3,800 ft. from E line of Potter Sur. No. 65 (10 mi. N of Eagle Pass) ..... T.D. 602 ft.; S.D.

McMULLEN COUNTY

Buford & Golightly's No. 1 Masuer, 760 ft. N line and 840 ft. E line of Sec. 22, H.T.&B. Sur., 5 miles W of Wentz ..... T.D. 408 ft.; S.D.
Gleason et al's No. 1 Miles, Chas. Stephens Sur. ..... Location
Hall & Howard's No. 2 Lark, Scrugham Sur. ..... T.D. 1,052 ft.; S.D.
Helvetia Oil Co.'s No. 1 W. E. Teal, 2,000 ft. N of Frio River and 2,136 ft. W line of survey, 3,000 ft. N 57 deg. W of Producers Oil Co.'s dry hole in M. Castillo Sur. No. 7 ..... Spudding.
Jane Oil Co.'s No. 2 Lark, 1,320 ft. N line of Survey and 150 ft. E of No. 1 in Sceligham Sur... ..... T.D. 1,066 ft.; testing.
Lefevre & Spice's No. 3 Hagist, 2,034 ft. due W of the Lefevre & Spice No. 1 Hagist, Sec. 17 ..... T.D. 1,918 ft.; D.S. test showed S.W.
Loma Oil Co.'s No. 26 Jacob, 182 ft. W line and 805 ft. S line of G.H.&A. Sur. No. 5 ..... T.D. 1,070 ft.; comp. 30 bbls. on pump.
Don Long's No. 1 Nueces Land & Livestock Co., Sec. 111 ..... Location.
W. C. McBride Co.'s No. 1 Hagist, 330 ft. out of the NE cor. of S half of SE Sec. 1 (¼ mi. E of Trinity Drillers' No. 1 Hagist dry hole) ..... Location.
H. D. Sheldon's No. 1 Jacob, 3,900 ft. NE line, 1,000 ft. NW line of W. B. Benham Sur. No. 9 ..... Rigging up.
C. C. Shumway's No. 6 Shiner, 2,310 ft. from N line and 330 ft. from E line of NE¼ of Section 62 of the Shumway Subdivision of the Shiner Ranch..... T.D. 596 ft.; S.D.
Texio Oil Co.'s No. 3 Jacobs, 5,293 ft. NE line and 330 ft. SE line of Benham Sur. ..... T.D. 916 ft.; C.O.

MEDINA COUNTY

Scoggins & Sanders' No. 1 L. W. Burell, 150 ft. from E line, 1,750 ft. from N line of M. E. Gage Sur. 395. T.D. 1,140 ft.; S.D.

MILAM COUNTY

O. H. Birdwell's No. 1 J. R. Bartek, 150 ft. from N line, 180 ft. from W line of 88-ac. tract in J. A. de Pena Sur. ..... T.D. 1,559 ft.; show of oil est. ⅛ bbl. per day; comp.

MENARD COUNTY

Duffey-Chedster's No. 1 Mears Wilkinson, 660 ft. S line and 660 ft. W line of T.&N.O. Sur., Sec. 23, Abstract 756 ..... Rigging up.

NUECES COUNTY

Benedum & Trees' No. 1 Bickham, 3,050 ft. NE line 375 ft. SE line of 200-ac. tract in Farras Sur. ..... Drlg. 5,275 ft.
Clymore Prod., Inc.'s No. 4-A Ingram, 660 ft. S and E lines of Lot 5, Sec. 6, Peters Subd. No. 2 ..... Bldg. derrick.
Clymore Prod., Inc.'s No. 1-B J. C. Ingram, 500 ft. N line, 660 ft. E line of Lot 4, Sec. 9, Peters Subd. No. 2 ..... Drlg. 1,750 ft.
Clymore Prod., Inc.'s No. 1-D J. C. Ingram, 660 ft. N line, 660 ft. E line of Lot 7, Sec. 6, Peters Subd. No. 2 ..... Moving in rig.
Diadem Oil Co.'s No. 1 J. C. Mayo, 1,000 ft. along line from SE cor. in NW direction, thence due N 300 ft. (near Robstown), Sec. 23 ..... Drlg. 5,275 ft.
Sullivan and Texon Royalty Co.'s No. 1 Simmons & Perry, 330 ft. from S and W lines of NE of square 640-ac. section out of SW cor. of Simmons & Perry tract, 2 miles east of Agua Dulce Field ..... T.D. 6,510 ft.; abd.
Texas Seaboard's No. 1 Chapman, 1,320 ft. N and E lines of Sec. 40, 12m iles SW of Corpus Christi..... T.D. 1,202 ft.; W.O.C.

REAL COUNTY

H. J. Heartwell et al's No. 2 L. J. Haby, 694 ft. from W line and 2,153 ft. from S line of A.B.&M. Sur. No. 175 ..... Drlg. 2,050 ft.

SAN PATRICIO COUNTY

Atkins-O'Neil and Continental's No. 2 Welder, 466 ft. from S and E lines of lease, Blk. 2, two locations S of Circle W Oil Co.'s No. 1 Welder ..... Location.
Bunte et al's No. 1 C. C. Smith, start at NE cor. of F. Miller tract, go E 2,338 ft., thence S at right angles 819 ft., A. Armstrong Sur. (3 mi. SW of Odom) ..... Coring 5,550 ft.
Carpenter et al's No. 1 Sadler, 300 ft. each way out of SE cor. Blk. 1, Sec. 32, T Perez Sur. .... T.D. 2,390 ft.; S.D.
Heep Oil Co.'s No. 1 R. H. Welder, 300 ft. from N line, 467 ft. from W line of Welder 5.46-ac. tract... Moving in material.
Jane Oil Co.'s No. 1 Ragsdale Bros., Sec. 58, Geo. H. Paul Subd. ..... Location.
Josey Oil Co.'s No. 1 Welder, 1,500 ft. NW or Atkins & O'Neil and Continental Oil Co.'s No. 1 discovery well ..... T.D. 5,378 ft.; D.S. test 5,358-78 ft. showed 6 fourbles oil and 2 fourbles S.W. in 15 min; W.O.C; to drill to 6,000 ft.
J. C. Means' No. 1 C. C. Smith, 990 ft. from N line, 330 ft. from W line of survey, J. W. Pays Sur., 1¼ miles NE of Angelita ..... Location.
Petrol Corp.'s No. 1 R. H. Welder, 467 ft. from S and E lines of 300-ac. tract ..... Moving in rig.
Plymouth Oil Co.'s No. 1-B Welder, 3,500 ft. NW of No. 1-A e..... Rigging up.
Plymouth Oil Co.'s No. 2-A Wilder, 1,320 ft. due E of No. 1-A ..... Drlg. 1,200 ft.

STARR COUNTY

Chas. H. Andrews et al's No. 1 A. Guerra, San Jose grant, 330 ft. from N and 150 ft. from E line of Sec. 6 (NE part of county) ..... T.D. 310 ft.; S.D.
B. & B. Oil Co.'s No. 2 Kelsey Bass, 330 ft. from W and S lines of Blk. 12 of Subd. of Porcions 86 and 87 Jurisdiction Camargo ..... Rigged up and S.D.
Jim Clouć, Inc.'s No. 1 J. Rodriquez, Share 35, Porcion 38, ancient jurisdiction of Camargo ..... Location.
Cooper & Andrews' No. 1 J. M. Martinez, SW cor. of Sec. 135 ..... Old well, to deepen; T.D. 3,300 ft.
Danvers & Harrison's No. 1 M. Guerra, 6,162 ft. NE line, 1,822 ft. NW line of Porcion 55 ..... T.D. 1,675 ft. (no report).
Dean Bros.' No. 1 M. M. Garcia, 2,100 ft. from S line, 4,600 ft. from W line of Sur. No. 916 ..... T.D. 150 ft.; S.D.
Great Plains Oil Co.'s No. 1 Sanchez, 660 ft. from W line, 330 ft. from S line of SE NW of Sur. No. 344 .. T.D. 3,905 ft.; S.D.
McDonald & Campbell's No. 1 C. C. Bowman, 330 ft. from N and W lines of Blk. 13 ..... S.D. for wtr. 3,215 ft.
McDonald's No. 1 E. A. Pfley, 2,600 ft. from S and W lines of Sur. 933 ..... T.D. 2,500 ft.; S.W.; waiting orders.
Merle Gundy's No. 1 Block, NW of Sur. 167 ..... Spud.
Mitchell's No. 1 Kelsey-Bass, 150 ft. from N, 1,150 ft. from E lines of Share 5, Porcion 75, ancient jurisdiction of Camargo ..... Location.
Sun Oil Co.'s No. 6-C, V. C. deGuerra et al, 3,300 ft. from NW and 660 ft. from SW lines of Share 1, Saratoga grant, NW Starr County ..... T.D. 2,212 ft.; straightening hole.
Weekly Oil Corp.'s No. 1 M. M. Garcia, 330 ft. from S, 330 ft. from W lines of Blk. 40, tract 1, in N end of Porcion 99, ancient jurisdiction of Camargo.. Rigging up.

TRAVIS COUNTY

Humble O. & R. Co.'s No. 1 P. C. Wells, 150 ft. NW line, 150 ft. NE line of farm, 135 ft. SW line and 1,000 ft. SE line of James P. Kemp Sur. ..... Rigging up.

UVALDE COUNTY

Evans & Johnson's No. 1 Farris, J Hammons Sur. .... T.D. 1,093 ft.; S.D.
Lon Evans' No. 1 Stone, 2,566 ft. from N line and 1,473 ft. from E line of survey, 8½ miles NE of Uvalde, Kent Sur. No. 652 ..... Drlg. 150 ft.
Humble Oil & Ref. Co.'s No. 1 R. L. Anderson, 7,460 ft. SW of NE line and 9,100 ft. SE of NW line of J. J. Guerra Sur. (3 mi. NE of Uvalde) ..... Drlg. 2,103 ft.
T. T. Word's No. 2 Trulove, 40 ft. N. 42 deg. E. of No. 1.. T.D. 400 ft.; S.D.

WEBB COUNTY

Fidelity Exploration Co.'s No. 1 Soldivar, 1,300 ft. from E line, 2,600 ft. from N line of Sur. 657 ..... Set surface csg. at 200 ft.; W.O.C.
French Oil Co.'s No. 7-A Benavides, 750 ft. W line, 1,700 ft. S line of Sur. No. 659 ..... Spudding.
Gohlson's No. 1 Yeager, 330 ft. W line and 300 ft. S line of NW¼ of Sur. 346, NE part of county..... Location.
J. D. Manley's No. 1 S. Benavides, 347 ft. NW line, 313 ft. NE line of Blk. 318, Hill Subd. of M. Arispe grant ..... Derrick.
Shankel et al's No. 1 Saldivar, Sur. 652 of J. V. Borrego grant ..... R.U.
United Production Co.'s No. 1 Bruin, Block 42, Survey 8, Mariano Arispe Grant, E of Bruni City ..... T.D. 3,417 ft.; showed 3 joints of 42 grav. oil and 6 joints of mud from 3,410-17 ft.; will not flow, to put on gas lift.
Weekley Oil Corp.'s No. 1 R. Salvidor, 1,269 ft. from E line and 243 ft. from N line of Sec. 657, Borrego grant (SE part of county) ..... T.D. 657 ft.; S.D.

WILSON COUNTY

A. P. George's No. 1 fee, 150 ft. from SE line and 300 ft. from SW line of 86.32-ac. tract in Canuto Diaz Sur. ..... T.D. 976 ft.; S.D

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Pfiel & Vogel's No. 1 Gutzeit, Flores grant, 150 ft. N of road and 150 ft. from W line of farm, 7 mi. NW of Floresville ..... S.D. 809 ft.

WILLIAMSON COUNTY

McLean et al's No. 2 R. C. Miller, 800 ft. to S line, 100 ft. to W line of tract, B. Manlove Sur. ..... T.D. 3,300 ft.; cleaning out.

Taylor Ref. Co. et al's No. 3-A John Reiger, H.&W. Sur. T.D. 919 ft.; pumping 25 bbls.

ZAPATA COUNTY

J. W. Killam's No. 1 Bruni, 660 ft. SE line, 330 ft SW line of Blk. 14, Sur. 13, 4 miles NW of Mirando Valley ..... Location.

R. B. Morrison's No. 1 Y. and R. Ramirez, 330 ft. from NE line and 330 ft. from SE line of Blk. 4, Share 20, Porcion 19 (5 mi. from Starr County line) ..... Drlg. shale 1,785 ft.

H. V. & W. Oil Co.'s No. 1 Cuellar ..... Set 8-in. csg. at 1,100 ft.; W.O.C.

Muckelroy's No. 1 Flores, on NE line and 75 ft. from SE line of Lot 2, Blk. 30, Muckelroy Subd. of Porcion No. 37 ..... Derrick.

Robert Newton's No. 1 O. W. Killam, 150 ft. NW line, 150 ft. SW line, Sec. 186, Blk. 6 ..... Location.

Joe Palmer's No. 11 S. Vela, 330 ft. from NE and SE lines of Blk. 170, Share 4 of L. Grillo grant, (3 mi. E of Redondo Pool) ..... Moving in.

Texas Co.'s No. 49 Jennings, N 12 deg. 30 min., E 750 ft. from No. 45 ..... T.D. 1,214 ft.; est. 10,000,000 ft. gas and spray oil.

Southwest Texas Proven Areas

Week Ending June 9

NORTH DALE POOL—BASTROP COUNTY

Watt L. Saunders' No. 1 Harris, 1,100 ft. from SW line, 2,830 ft. from NW line of John Maximilian Sur. No. 22 ..... Top Austin 2,149 ft.; T.D. 2,311 ft.; S.D.

NORTH PETTUS FIELD—BEE COUNTY

United Prod. Co.'s No. 45 Ray, 2,332 ft. SW of No. 13 and parallel with N line of tract, thence SE at right angles from N line of tract, W. J. Porter Sur. ..... Drlg. 4,160 ft.; S.O. 4,031-36 ft.

ECKERT POOL—BEXAR COUNTY

Alamo Nat. Gas Co.'s No. 2 Coreth, 300 ft. SE of Humble's No. 2 Coreth in A. Stafford Sur. ..... T.D. 1,055 ft.; set 6⅝-in. csg.; S.D.

J. F. Harrison's No. 4 F. Gembler, 150 ft. from NW line, 460 ft. from NE line of 88-ac. tract in J. Montez Sur. ..... T.D. 831 ft.; S.D.

S. J. Moore's No. 5 T. W. Masterson, 150 ft. from S line, 175 ft. from W line of 41-ac. tract in Miguel Gortaris Sur. ..... T.D. 736 ft.; 6⅝-in. csg.; S.D.

S. J. Moore's No. 4 T. W. Masterson, 150 ft. from S and W lines of tract in M. Cartari Sur. ..... T.D. shale 695 ft.; S.D.

VON ORMY POOL—BEXAR COUNTY

Von Ormy Oil Co.'s No. 2 E. B. Carruth, 515 ft. from W line, 1,970 ft. from S line of 160-ac. tract out of 657-ac. tract in F. Rolen Sur. ..... T.D. 720 ft.; S.D.

EAGLE HILL POOL—DUVAL COUNTY

Shasta Oil Co.'s No. 3 J. R. Foster, 990 ft. from N line and 165 ft. from W line of 70-ac. tract in Sec. 206.. Moving in rig.

S.R.C. Corp.'s No. 1-C Foster, 2,317 ft. E line, 330 ft. S line of Sur. 270 ..... Location.

GOVERNMENT WELLS POOL—DUVAL COUNTY

Bridewell Oil Co.'s No. 4 Hahl, Block 29, Survey 250.... T.D. 2,337 ft.; comp. 150 bbls. dly.

Central Producers' No. 2 Luptak, 330 ft. N line, 150 ft. E line, E½ SE of Sur. No. 41 ..... T.D. 2,291 ft.; comp. 20 bbls. hrly.

Humble Oil & Ref. Co.'s No. 24 Paul White, 4,456 ft. from E line and 330 ft. from N line Sec. 249..... T.D. 2,219 ft.; comp. 15 bbls. hrly.

Humble O. & R. Co.'s No. 25 Paul White, 990 ft. S line, 330 ft. E line of Sec. 249 ..... T.D. 2,392 ft.; setting csg.

Luse & Cloyes' No. 1 Hagist, 330 ft. from N and W lines of Lot 13, Section 265 ..... T.D. 2,561 ft.; P.B. to 1,958 ft.; T. D. 2,168 ft.; 8-ft. sand; W.O.C.

Magnolia Pet. Co.'s No. 1 Duval County Ranch, 330 ft. N line and E line of Sur. No. 58 ..... Moving in rig.

Magnolia Pet. Co.'s No. 3 Duval County Ranch, 1,650 ft. S line, 330 ft. E line of Sur. No. 59 ..... T.D. 2,227 ft.; comp. 6 bbls. hrly.

Magnolia Pet. Co.'s No. 28 Duval County Ranch, Survey No. 208 ..... T.D. 2,344 ft.; comp. 50 bbls. on pump.

Magnolia Pet. Co.'s No. 4 Hahl-Riley, Survey No. 45.... T.D. 2,393 ft.; abd.

Reed & McKay's No. 3 State-Lundell, 660 ft. W line 330 ft. S line, S½ NW Sur. No. 60 ..... T.D. 2,234 ft.; comp. 90 bbls. hrly.

Reynosa Oil Co.'s No. 5-D Duval County Ranch, 990 ft. from S line, 330 ft. from E line of S½ SW Sec. 362.. T.D. 2,284 ft.; W.O.C.

Russ and others' No. 1 Cantrell, NE¼ of NE¼ of Sur. No. 61 ..... T.D. 2,315 ft.; testing.

Smith Storey's No. 7 Lundell, 150 ft. from N line and 150 ft. from W line of NE¼ of SW¼ of Sur. 48..... T.D. 2,310 ft.; comp. 75 bbls. dly.

J. D. Clair Smith's No. 1 W. P. Norton, Survey 62 ..... T.D. 2,377 ft.; comp. 500 bbls.

Southwest Drlg. Co.'s No. 13 Hahl, 990 ft. from S line, 330 ft. from W line of SE Sec. 43 ..... Drlg. 2,100 ft.

Sun Oil Co.'s No. 33 Weiderkehr, 330 ft. from S line. 990 ft. from E line of Sur. No. 359 ..... Location.

Sun Oil Co.'s No. 49 Weiderkehr, 660 ft. S of No. 48 and 660 ft. W of No. 46, Sur. 359 ..... Location.

Sun Oil Co.'s No. 62 Weiderkehr, 330 ft. from S line, 990 ft. from W line of Sec. 361 ..... T.D. 1,614 ft.; S.W. sand 1,552-66 ft.; testing 1,594-1,614 ft.

Sun Oil Co.'s No. 63 Weiderkehr, 990 ft. from S line, 2,310 ft. from E line of Sec. 359 ..... T.D. 2,242 ft.; comp. 4 bbls. hrly.

The Texas Co.'s No. 10 Duval County Ranch Fee, 990 ft. N and 330 ft. W of SE cor. of lease in Sec. 362, G. Garza Sur. ..... T.D. 2,322 ft.; comp. 100 bbls. on pump.

Texas Co.'s No. 11 M. B. Johnson, 990 ft. W line and S line of N½ SW of Sur. No. 43 ..... Location.

KINGSVILLE POOL—KLEBERG COUNTY

Ryals & Bartlett's No. 1 Flato, 150 ft. from N line, 30 ft. from W line of NE SE Sec. 46, of Kleberg Town & Improvement Co. Sur. ..... T.D. 935 ft.; S.D.

JACOB POOL—McMULLEN COUNTY

Jane Oil Co.'s No. 1 Lark, 150 ft. from S and 100 ft. from W line of Blk. 13 ..... T.D. 1,048 ft.; testing.

C. R. Kennon's No. 1 Lark, 810 ft. from W line, 150 ft. from N line of 20-ac. tract, Blk. 27, Scrugham Sur. ..... Coring 1,000 ft.

Loma Oil Co.'s No. 23 Jacob, 660 ft. S of No. 11, 330 ft. from E line of lease, Sur. No. 7 ..... T.D. 1,003 ft.; S.D.

CUEVITAS POOL—STARR COUNTY

Sun Oil Co.'s No. 6-B, M. Guerra & Son, 2,310 ft. S of Starr and Jim Hogg County lines and 2,970 ft. W of E line of Los Cuevitas Sur. ..... T.D. 2,055 ft.; D.S. test 2,047-55 ft.; 350 ft. oil in 20 min.; no gas pressure; 1,800 ft. oil in hole. Testing.

Sun Oil Co.'s No. 5-C M. Guerra & Son, 1,320 ft. NE of No. 4-C La Sacatosa grant ..... Location.

AGUA DULCE—NUECES COUNTY

Camp et al's No. 3 King, 990 ft. S of N line, 330 ft. W of E line of Sec. 24, R. Garza Sur. ..... T.D. 6,021 ft.; Schlumberger shwd three sands; setting csg.

Garland Clymore's No. 2-A Ollie Purl, 660 ft. from E line and 660 ft. from S line of Blk. 4, Section 6, Ross Peters Subd. ..... T.D. 4,804 ft.; W.O.C.

SAXET FIELD—NUECES COUNTY

South Mineral Oil Co.'s No. 1 J. W. Page, E. Villareal Sur., 471 ft. from E line, 160 ft. from S line of 160-ac. tract ..... T.D. 4,871 ft.; W.O.C.

LOS OLMOS POOL—STARR COUNTY

Los Olmos O. & G. Co.'s No. 57 Kelsey Bass, 150 ft. from N line, 548 ft. from W line of SE SW Sec. 6, Porciens 75, 76 and 77 ..... T.D. 640 ft.; standing; depth corrected.

Production in Oklahoma Increases Temporarily; More Good Wells Promised in Lucien Field

By JAMES McINTYRE

As usual early in the month Oklahoma City producers went on a production rampage and produced an average of 228,310 bbls. per day in the past week, sending the daily average of the State to 548,935 bbls. The Seminole-St. Louis area, including 13 pools, assisted somewhat in the production increase. The State's increase amounted to 71,980 bbls. per day.

Leasers are busy in Grant, Garfield and in parts of Oklahoma County. W. E. Witt has made a location for a test on a block of several thousand acres in Grant County, which has stimulated others to get in for protection. The Witt location is in SW SW SE Section 19-29-3w. The Garfield County play is a checkerboarding campaign by majors, including Gypsy Oil Co., Phillips Petroleum Co., Twin State Oil Co., Mid-Continent Petroleum Corp., Magnolia Petroleum Co., Skelly Oil Co. and Sinclair Prairie Oil Co. The leasing was scattered through Townships 20-4w, 21-4w, 24-7w, 24-6w, 23-6w, 21-6w, 20-6w and 24-3w.

Several wells in the Lucien Pool, in Noble County, were showing for producers while drilling in Wilcox sand. A number of good sized producers were completed in Oklahoma County. The Carter Oil Co. drilled into a 30,000,000-foot gas production in its No. 3 Riddle in Section 4-1s-3w, Carter County, and the well was out of control until Sunday morning.

Oklahoma Production

Estimated daily average production in the week ending June 9 and the preceding week was as follows:

Pool—	Barrels June 9	Barrels June 2
Allen	8,505	8,675
Blackwell district	5,000	5,100
Bristow-Slick	10,500	10,250
Cushing-Shamrock	14,000	13,750
Chandler district	6,000	6,500
Davenport	750	750
Healdton	9,100	9,100
Hewitt	5,000	5,000
Burbank	9,100	9,100
South Burbank	5,100	5,100
Balance of Osage	24,750	24,750
Lucien	8,370	11,110
Crescent	3,505	4,495
Marshall-Lovell	1,400	1,000
Bowlegs	9,550	10,005
Carr City	7,145	4,560
Earlsboro	9,675	9,200
East Earlsboro	9,310	10,170
South Earlsboro	1,370	1,130
Little River	12,550	11,570
East Little River	815	910
Seminole	11,130	12,345
East Seminole	970	1,040
Searight	3,235	2,665
Maud	1,275	1,270
Mission	3,700	3,420
St. Louis-Pearson	22,760	18,300
Cromwell	4,650	4,650
Papoose	1,350	1,350
Oklahoma City	228,310	158,455
Asher-West Asher	1,990	1,985
Tatums	6,640	6,625
Sholem-Alechem	4,500	4,500
Duncan	4,360	4,350
Tonkawa-Garber-Thomas	6,800	6,800
Fish	2,490	2,700
Konawa	2,060	2,145
Gray	1,695	2,070
Graham	3,600	3,600
Holdenville	3,245	3,050
Wewoka	4,450	4,450
Yale-Jennings	5,100	5,100
Other fields	69,130	68,960
Total	548,935	476,955

Osage County

Completions in Osage County reported in the past week were as follows:

E. B. Lawson's No. 2, 150 feet north and 1,590 feet west of C Section 30-27-12, dry and abandoned at 382 feet.

Carter Oil Co. and Norbla Oil Co.'s No. 5 Ducotey, C NE NE SE Section 3-25-6, sand at 2,808-67 feet, flowed 3,120 bbls. of oil and 2,850,000 feet of gas in 24 hours.

Skelly Oil Co.'s No. 2 C. DeNoya, NE cor. SE Section 16-25-6, sand at 2,827-71 feet. Much water and little oil; dry and abandoned.

Sinclair Prairie Oil Co.'s No. 2, NE cor. Section 21-25-6, sand at 2,734-55 feet, shot with 50 quarts, 220 bbls. in 24 hours.

The Texas Co.'s No. 10, NW NE SE Section 30-25-8, Burgess sand at 2,475-90 feet; shot with 30 quarts, swabbed 40 bbls. in 24 hours.

Continental Oil Co. and Gypsy Oil Co.'s No. 7, NE NW NE Section 21-24-7, Bartlesville sand at 2,600-70 feet, shot with 100 quarts; 213 bbls. the first 13 hours and then 230 bbls. the next 24 hours. Same companies' No. 8, NW NE NE Section 21-24-7, Bartlesville sand at 2,585-2,672 feet, flowed 960 bbls. naturally in 24 hours.

E. O. Platter's No. 13, C SW NE Section 30-22-9, sand at 425-450 feet, pumped 5 bbls. per day.

Cooper & Higgins' No. 1, SW cor. Section 25-21-10, deepened from 1,981 feet to 2,190 feet and plugged back to 2,000 feet, pumped 5 bbls. per day.

Carter Oil Co. and Bay Oil Co. were digging cellar for No. 5 Oliphant, SW SE SE Section 10-25-6; Champlin Refining Co., cellar dug for No. 7 Maker, SW SE NE Section 15-25-6; Champlin Refining Co.'s No. 3 Terrill, NW SW SE Section 15-25-6, building rig; A. H. Kasishke's No. 6, NE SE SW Section 15-25-6, rigging up; Champlin Refining Co.'s No. 1 Parker, NW cor. NE Section 22-25-6, cellar; Lewis Production Co. and Continental Oil Co.'s No. 2, SW cor. SE Section 9-24-7, building rig; Sinclair Prairie Oil Co.'s No. 6, SE NW NW Section 15-24-7, location; Champlin Refining Co.'s No. 5, NW NE NW Section 16-24-7, cellar; No. 6 on same lease, NE NW NW Section 16-24-7, location; A. H. Kasishke's No. 1, SE cor. NE Section 16-24-7, rigged up to deepen from 2,640 feet; same operator's No. 11, NW NE NE Section 16-24-7, location; same operator's No. 12, NE NW NE Section 16-24-7, location. Tide Water Oil Co.'s No. 9, CEL SW Section 8-23-11, rigged up to deepen from 1,761 feet; Sand Springs Home's No. 2, SW NE SE Section 2-20-10, drilling at 225 feet.

Kay County

Argo Oil & Gas Co.'s No. 1 Freese, SW NE NW Section 30-25-1w, SW NE NW Section 30-25-1w, Kay County, had a show of oil and gas at 4,265-67 feet and an increased showing at 4,308-30 feet. It flowed an estimated 75 bbls. a day and was shut in for tankage.

Alfalfa County

Acre and others' wildcat test in C SW NE Section 14-24-11w, in Alfalfa County was swabbed down and 40 bbls. of oil recovered, and the crew was cleaning out 600 feet off bottom. This well had reached a total depth of 6,460 feet. It has had a showing of oil at 5,910-17 feet, swabbed 70 bbls. at 6,255 feet in middle November of last year and swabbed 70 bbls. early in December and later was reported to be making a small flow about once a week.

Noble County

The Texas Co. and others' No. 1 Voss, SW NE SE Section 28-22-2w, a wildcat in Noble County was rigging up standard tools at 4,755 feet. It found Mississippi lime at 4,694 feet; Woodford shale at 4,697 feet; Misener sand at 4,735-42 feet, with a small showing of oil; Viola lime at 4,742 feet, and set 8-inch casing at 4,753 feet.

Magnolia Petroleum Co. has rotary tools in to start No. 1 Crawford, SE SE NW Section 27-21-2e, in southeastern Noble County.

In the Lucien Pool, Lucien Consolidated's No. 2 Miller, C NE SE Section 18-20-2w, had first Wilcox sand at 5,043 feet with a showing of oil at 5,047 feet and was drilling at 5,074 feet with 3,000 feet of oil in the hole. Later it was reported to have flowed 1,187 bbls. in 24 hours, while the crew was fishing, with the hole at 5,113 feet and in second Wilcox sand.

Shell Petroleum Corp.'s No. 2 Kolb, C SW NW Section 28-20-2w, was drilling at 5,016 feet, in first Wilcox sand topped at 4,952 feet. The well swabbed 2½ bbls. of oil per hour. At 5,084 feet it was flowing 75 bbls. an hour while drilling.

Magnolia Petroleum Co.'s No. 2 Long, C NW SE Section 20-20-2w, was drilling at 5,200 feet in the second sand and flowing 1,800 bbls. a day.

Skelly Oil Co.'s No. 2 Long, C SW NW Section 28-20-2w, flowed 751 bbls. in eight hours from Wilcox sands at 5,005-57 feet and 5,096-5,145 feet.

Magnolia Petroleum Co.'s No. 1 Smith, C NE SW Section 29-20-2w, found first Wilcox sand at 5,006-44 feet and flowed 88 bbls. in 24 hours and was drilling at 5,085 feet.

Logan County

Eason Oil Co., which started a well on a 10-acre location, its No. 3 Katscher, C NW SW SW Section 34-17-4w, shut it down for orders at 1,810 feet. All the wells in the productive area in the Crescent Pool are on 40-acre locations, including the Eason Oil Co.'s No. 1 Katscher. No completions were reported in the Crescent Pool, nor was any new work started in the field. There are only two wells actively drilling.

In the Langston Pool, Mid-Continent Petroleum Corp.'s No. 1 Moss, SW cor. SE Section 11-17-1w, was drilling at 960 feet.

Oklahoma County

Gypsy Oil Co. and others' No. 1 Grant, a community test, C SE SW Section 27-13-4w, Oklahoma County, was shut down at 6,067 feet, waiting for cement to set.

In the Oklahoma City Field R. Carl Larkins reports Helmerich, Payne and Larkins' No. 1 Rock Island right-of-way came in Monday morning making 300 bbls. per hour with gas at the rate of 10,000,000 feet per day and about one-third sand. The well came in without bailing. It is located in NE NW SE Section 34-12-3w, and is a town lot operation. It had been shut in by a Supreme Court decision for four and a half months. The location is a 50x140-foot lot and while Oklahoma City requires two and one-half acres of platted and five acres of unplatted ground for a location, the Supreme Court granted the owners permission to complete this well. Larkins and associates are drilling seven wells

Wildcat Operations in Oklahoma

Week Ending June 9

Northern Oklahoma

ALFALFA COUNTY

Acre et al's No. 1 Acre, C SW NE Sec. 14-24-11w ..... T.D. 6,460 ft.; C.O.

CADDO COUNTY

Denver Prod. & Ref. Co.'s No. 1 Noe, NW SW SW Sec. 34-10-10w ..... Drlg. 10,375 ft.

CLEVELAND COUNTY

Phillips Pet. Co. et al's No. 1 Baker, C SE NW Sec. 11-9-2w ..... Drlg. 1,810 ft.

COAL COUNTY

Moore & Deaner's No. 1 Edward, NW NE SE Sec. 27-2-8 ..... S.D. 4,970 ft.

Emanuel, Rudman & Hatcher's No. 1 Moyer, C SW SE NW Sec. 7-3-8 ..... S.D. 1,525 ft.

GARFIELD COUNTY

Ross Cummings et al's No. 1 Gage, SE NW Sec. 27-22-3w ..... Spudded.

GARVIN COUNTY

Denver P. & R.'s No. 1 Newburn, C SE SW Sec. 22-5-1e. Drlg. 4,870 ft.

HUGHES COUNTY

Dickison et al's No. 1 Webster, NW NE Sec. 23-10-10. Rig on ground.

J. B. Hill's No. 1-A Perkins, C W½ SW SW Sec. 7-5-9. T.D. 1,075 ft.; S.D.

Olympic Oil Co.'s No. 1-A McClassen, SE NW NW Sec. 12-9-8 ..... Drlg. 3,200 ft.

Olympic Oil Co.'s No. 1 McClassen, SE NW NW Sec. 13-9-8 ..... T.D. 600 ft.; lost tools; S.D

Scruggs et al's No. 1 Black, NE Sec. 13-9-10 ..... Wilcox sand 3,922-29 ft.; S.W.

GRANT COUNTY

W. Earl Witt et al's No. 1 Patton, SW SE Sec. 19-29-3w. Cellar and pits.

KAY COUNTY

Argo O. & G. Co.'s No. 1 Freese, SW NE NW Sec. 30-25-1w ..... Drlg. 4,253 ft.

KINGFISHER COUNTY

Jadeka Dev. Co.'s No. 1 Frakes, C SW NE SW Sec. 16-15-6w ..... S.D. 3,068 ft.

KIOWA COUNTY

Bailey & Johnson's No. 1 Patts, SW NW Sec. 31-7-14w. Drlg. 300 ft.

LEFLORE COUNTY

East Okla. Oil & Gas Co.'s No. 1 Metcalf, SW cor. Sec. 2-4-26 ..... Drlg. 1,505 ft.

Murdock et al's No. 1 fee, SW NE SW Sec. 15-5-25e.... T.D. 2,425 ft.; fishing.

LINCOLN COUNTY

Harvey Newman Oil Co.'s No. 1 Rueb, C NW NE Sec. 23-15-5 ..... Cellar

Mid-Continental Oil Co.'s No. 1 Bolby, NE SE Sec. 27-12-2 ..... Moving in rotary.

The Texas Co.'s No. 1 Gessmann, SE NE Sec. 33-14-4 ... C.O. 4,240 ft.

LOGAN COUNTY

W. N. Anthony's No. 1 Fruin, SE SW Sec. 4-16-1 ..... S.D. 2,040 ft.

McCLAIN COUNTY

Carter Oil Co. et al's No. 1 Hanner, SW NE NW Sec. 24-5-1w ..... Abd. 6,526 ft.; lost drill pipe.

NOBLE COUNTY

Continental Oil Co. et al's No. 1 Bennett, SE NW Sec. 19-20-1w ..... T.D. 4,920 ft.; fishing.

Magnolia Pet. Co.'s No. 1 Crawford, SE NW Sec. 27-21-2. Rig moved in.

Texas Co. et al's No. 1 Voss, C NE SE Sec. 28-22-2w.... Set 8-in. csg. 4,753 ft.

OKFUSKEE COUNTY

Delton Oil Co.'s No. 1 Fixico, SE cor. Sec. 7-11-8..... Rig on ground.

OKLAHOMA COUNTY

Gypsy Oil Co. et al's No. 1 Harris, C SW NE Sec. 27-13-4w ..... T.D. 6,067 ft.

(Continued on Next Page)

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THE SALVAGE

of Wyatt Welded Steel Tanks in Field Storage . . . . .

Because electric welding makes a storage tank one solid sheet of steel, there is a belief among some oil men that take down and re-erection is impracticable.

The Wyatt Company has already moved electric welded tanks from one location to another. The records show that the salvage is equal to that of bolted tanks of the same size.

The welded tank is leak-proof and gas tight. It has already proved itself the tank most favored for large storage tanks. The same advantages apply to field storage tanks from 200 to 1,000 barrels. The Wyatt Company is prepared to give quick delivery and fast erection service.

We also offer welded gun barrels.

WYATT

METAL & BOILER WORKS

Capital $1,000,000

Plants at . . . DALLAS AND HOUSTON

Distributors:

Steel Tank Construction Co., Dallas, Texas.

in the Oklahoma City Field. Larkins and Warr's No. 1 Beauchamp, N half W half SW SW SE Section 22-11-3w, was completed, flowing 1,040 bbls. in four hours. This lease is two and one-half acres in extent.

Wofford Drilling Co. and Skelly Oil Co.'s No. 2 Military addition, 1,230 feet south and 190 feet west of C Section 34-12-3w, was completed. It produced 997 bbls. in four hours with gas at the rate of 2,000,000 feet per day. Sand at 6,385-6,505 feet.

Anderson & Kerr's No. 1 M-K-T, 113 feet from north line and 872 feet from the east line, NW Section 3-11-3w, was completed. It made 715 bbls. in four hours on gas lift. Sand at 6,348-6,435 feet.

Gulf Production Co. of Oklahoma's No. 1 Rucker, 906 feet north and 20 feet east of C Section 15-11-3w, flowed 388 bbls. in four hours with gas at the rate of 2,500,000 feet per day and was completed. Sand at 6,415-6,530 feet.

Crofton Oil Co. completed No. 1 Wallace, 403 feet north and 337 feet east of C Section 22-11-3w, produced 147 bbls. in four hours on the gas lift and gas at the rate of 2,500,000 feet per day and was completed. Sand at 6,488-6,526 feet.

Inland Development Co.'s No. 1 Timken, 1,270 feet south and 605 feet east of C Section 22-11-3w, had Wilcox sand at 6,485-6,550 feet and flowed 2,449 bbls. in 20 hours with 4,000,000 feet of gas. Later, on a potential test, it flowed 557 bbls. in four hours and was completed.

Nebo Oil Co. completed No. 1 Community, 75 feet from north line and 270 feet from the west line, NE Section 27-11-3w. It flowed 749 bbls. in four hours with gas at the rate of 8,500,000 feet per day.

In the Newalla area the Springrose Drilling Co. and others' No. 1 Edwards C SE SE Section 19-11-1e, was drilling at 6,525 feet. It found the top of the Sylvan in the new hole at 6,268 feet; Viola at 6,320 feet; Simpson dense at 6,378 feet; dolomite at 6,392 feet; a show of gas at 6,393 feet and top of the Wilcox sand at 6,514 feet and drilling at 6,525 feet.

New work in Oklahoma County reported in the past week included Anderson & Kerr's No. 1 Spencer addition, 235 feet north and 242 feet west of C Section 22-11-3w, a location; Fain Drilling Co.'s No. 1 Ownbey, 80 feet from the south line and 1,255 feet from the east line of NE Section 22-11-3w, drilling at 2,910 feet; Banner Production Co.'s No. 2 Bell, NW NE Section 27-11-3w, rig.

Greater Seminole Field

Verser, Clay & Co.'s No. 1-A Butler, SE NW NE Section 20-9-6, Seminole County, was a hole full of water from Calvin sand at 2,718-2,830 feet and was abandoned.

Keyokla Oil Co.'s No. 2 Hines, NW cor. NE Section 9-7-4, Pottawatomie County, was acidized in Hunton lime at 3,650 feet, total depth 3,714 feet, and flowed 336 bbls. of oil in 48 hours. It will be re-acidized.

Conley Drilling Co.'s No. 1 Vinson, NE cor. Section 13-7-4, had dolomite at 3,900-83 feet. It swabbed 300 bbls. in 24 hours and the crew was cleaning out.

Prince Drilling Co.'s No. 1 Brandenberg, NE SW NW Section 21-7-4, flowed 273 bbls. in 48 hours following an acid

Wildcat Operations in Oklahoma

(Continued from Preceding Page)

Springrose Drlg. Co.'s No. 1 Edwards, C SE Sec. 19-11-1 ..... Drlg. 6,525 ft.

OSAGE COUNTY

Norbla Oil & Gas Co.'s No. 1, NW SE Sec. 21-24-7 ..... Set 10-in. csg. 907 ft.
Peters Pet. Co. and Norbla Oil Co.'s No. 1, SW cor. Sec. 15-25-5 ..... Fishing; T.D. 1,430 ft.
Empire O. & R. Co.'s No. 1, SE NE Sec. 3-25-3 ..... Layton sand 2,570-2,621 ft.; pumped 62 bbls. oil, 90 bbls. of water.

PAWNEE COUNTY

Geo. Thomas' No. 1 School Land, SW cor. Sec. 13-20-5.. T.D. 3,438 ft.; U.R. 6-in. csg.

PITTSBURG COUNTY

Arkhoma's No. 1 Cummings, NW NE SE Sec. 4-4-12... Fishing 515 ft.
Exchange Drlg. Co.'s No. 1 Chunn, SE NW Sec. 29-4-14.. T.D. 350 ft.; waiting for csg.
W. E. Hailey's No. 1 Drew, NW SW Sec. 21-3-14 ..... S.D. 190 ft.
Mid-Western Oil & Gas Co.'s No. 1 Shelton, CSL SE NW Sec. 7-7-18 ..... Drlg. 2,306 ft.
Moffett & Hall's No. 1 Jones, C NE NW Sec. 14-3-14 .... Lost tools; T.D. 3,200 ft.; S.D.
C. L. Carlock's No. 1 Chunn, SE NW Sec. 29-4-14 ..... Rigging up.

PONTOTOC COUNTY

E. M. Blanchard's No. 1 Crabtree, NE SE NE Sec. 27-2-6.. S.D. 2,920 ft.
Boyle et al's No. 1 Newbern, SW NE Sec. 31-5-4 ..... Set 8-in. csg. 2,174 ft.
Dandridge et al's No. 1 Stafford, NW cor. Sec. 5-1-6e.. T.P. 670 ft.; running csg.
Riddle et al's No. 1 Barnes, SE NW SE Sec. 21-5-4 ..... Drlg. 2,145 ft.
Southern Oil Corp.'s No. 1 Ladd, C NW NW Sec. 27-3-7. Cellar.

POTTAWATOMIE COUNTY

Stanolind-Amerada's No. 1 Goodman, SW NE NE Sec. 5-10-4 ..... Rig.

SEMINOLE COUNTY

Harman Oil Co.'s No. 1 Bowlega, SE NE SW Sec. 1-7-7 ..... T.D. 1,655 ft.; U.R. 5-in. csg.
Flemlee et al's No. 1 Bowlega, SE NE SW Sec. 1-7-7.... S.D. 1,260 ft.
Tate & Starbuck's No. 1 Heard, SE NW Sec. 9-6-7..... Drlg. 935 ft.

Southern Oklahoma

ATOKA COUNTY

Company, farm and location—	Remarks:
Brookshire et al's No. 1 Rowland, NW NE NE Sec. 13-3s-10e	S.D. 3,565 ft.; 1,400 ft. of fluid in hole.
I. D. Boukan's No. 1 Howard, NW SW NW Sec. 20-2s-10e.	Drlg. 1,135 ft.
L. A. Fitts' No. 1 Blankenship, NE cor. NW Sec. 19-3s-10e	Drlg. 160 ft.
Malernee et al's No. 1 Greenville, N. B., NW SW Sec. 35-2s-13e	S.G. 1,665-77 ft.; running 8-in. csg.

CARTER COUNTY

Hudson & Poland's No. 1 Sullivan, NE SE Sec. 5-5s-1w.. T.D. 1,640 ft.; S.D. for wtr
McHenry et al's No. 1-A Ratliff, NW SW Sec. 28-1s-2w.. Set 10-in. pipe 24 ft.

COMANCHE COUNTY

Holden & Taylor's No. 1 Crutcher, SW cor. NE, Sec. 11-1n-12w (O.W.D.D.) ..... S.D. 616 ft.
F. F. Stevens' No. 1 Green, SE SW Sec. 11-1n-13w.. ..Drlg. 920 ft.
Holden & Taylor's No. 2 Crutcher, C NE Sec. 11-1n-12w. T.D. 1,196 ft.; drlg. on iron.

COTTON COUNTY

Ben Russell's No. 1 Zumbuemn, NE cor. SW Sec. 21-4s-12w ..... Drlg. 3,220 ft.

GARVIN COUNTY

National Prod. Co.'s No. 1 Littrell, NE cor. Sec. 31-2n-3w. S.D. 299 ft.

JOHNSON COUNTY

Okla. Oil Corp.'s No. 1, SW NE SE Sec. 11-2s-3..... Rig.

MARSHALL COUNTY

Paul Robb's No. 1 Vittetoe, C NE SE Sec. 11-5s-4e..... T.D. 4,937 ft.; drill pipe stuck.

MURRAY COUNTY

Gilcrease Oil Co.'s No. 1 Brown, SW cor. Sec. 26-1n-2e Drlg. 1,350 ft.
T. E. Revell et al's No. 1 Wolfe, NE cor. Sec. 18-1-2.... Drlg. 2,328 ft.

PUSHMATAHA COUNTY

J. V. Scrivener et al's No. 1 Swink, C NE SE Sec. 25-4s-20e ..... Setting csg. 410 ft.
Whitehead et al's No. 1 Messer, SE SW SW Sec. 35-3s-15e. T.D. 2,405 ft.; S.D.

STEPHENS COUNTY

George Pace et al's No. 1 Jack, NE NW NW Sec. 24-4s-4w ..... Drlg. 993 ft.
J. W. Madison's No. 1 Tussey, SW SE NW Sec. 24-1n-4w.. S.D. 3,210 ft.

TILLMAN COUNTY

I. H. Everett's No. 1 Crane, SW cor. Sec. 15-3s-14w ..... Rig.
Ben Russell's No. 1 Fowler, SE NW Sec. 21-4s-12w.. ...Rigging up.

treatment. It had Hunton lime at 3,660 feet and a hole full of oil at 3,780 feet. At 3,941 feet it swabbed 147 bbls. in 24 hours. It was acidized and then drilled into Sylvan shale at 3,975-80 feet.

Roush's No. 2 Moore, SW NW NE NE Section 22-7-8, was completed. It pumped 85 bbls. in 24 hours from Calvin sand at 1,182-1,203 feet.

Gypsy Oil Co.'s No. 4 Tenwas, CWL SW SE NW Section 25-6-4, swabbed 234 bbls. in 11 hours from pay at 2,404 feet and was drilling at 3,408 feet.

Vivian Oil Co.'s No. 1 Reed, NW SW NE Section 6-6-8, was abandoned. It was a hole full of water from Wilcox sand at 4,303-18 feet.

Harvey Drilling Co.'s No. 1 Chapman, NE cor. SE Section 8-6-8, which has been shut down for about six months at 1,580 feet, was abandoned.

New work in the Greater Seminole area included the following: Anderson & Kerr's No. 1 Foreman, C SW SE Section 18-9-5, Pottawatomie County, rigging up rotary; Oklahoma Oil Corp.'s No. 1 Johnson, SW NW Section 13-9-6, Seminole County, location for Hunton lime test; Mid-Continent Petroleum Corp.'s No. 13 Rentie, SE NE SE Section 14-9-6, rig; Pure Oil Co.'s No. 1 Strothers A, NE SW Section 26-9-6, an old well plugged back from 4,149 feet, will be acidized in Hunton and Simpson. The Texas Co.'s No. 1 Reed, NW cor. SE Section 27-8-8, cellar and pits; Maebris Oil Co.'s No. 2 Bohannon, SE cor. SW Section 27-7-4, rigging up rotary; Mid-Continent Petroleum Co.'s No. 8 Factor, CSL NE SE Section 15-7-8, a location; Blackwell Oil & Gas Co. and Jones' No. 1 Ferguson, NW SW SW Section 29-7-8, cellar and pits; Empire Oil & Refining Co.'s No. 1 Myers, SW SE NE Section 31-7-8, location.

Sinclair Prairie Oil Co.'s No. 1 Nichols, NE NW NE Section 19-9-6, deepened from 4,224 feet to 4,246 feet was shot with 20 quarts and pumped 125 bbls.

Burke Greis Oil Co.'s No. 2 Fixico, SW cor. Section 17-9-6, was plugged back from 4,235 feet to 2,690 feet and the 8-inch casing ripped at 2,650-80 feet pumped 20 bbls. of oil and 120 bbls. of water from Calvin sand. Both wells were completed.

Pontotoc County

Moore & Deaner's No. 3 Gray, NE SE NE Section 25-5-4, Pontotoc County, had Viola lime at 2,381 feet; set 6-inch pipe at 2,382 feet and found oil at 2,545-65 feet. It was drilled to 2,628 feet, finding salt water at 2,626 feet. It swabbed 75 bbls. of oil and 25 bbls. of water.

Dickinson Petroleum Corp.'s No. 2 Jackson, NW SW SW Section 22-5-6, swabbed 85 bbls. in 24 hours, after the hole had been deepened from 1,745 feet to 1,792 feet and shot with 10 quarts.

F. W. Merrick, Inc.'s No. 1 Norris, SE cor. Section 14-2-6, was shut down for orders at 4,005 feet. It had reached contract depth.

Crabtree & Kemp had machine in for No. 1 Gilmore, NW SE NE Section 22-5-8. Vierson and others had rig on the ground for No. 1 Fleming, NE SE NW Sectoin 18-5-5. Southern Oil Corp. has cellar completed for No. 1 Ladd, C NW NW Section 27-3-7.

Atoka County

L. A. Fitts was drilling at 160 feet in a wildcat test, No. 1 Blankenship, NE cor. NW Section 19-3s-10e, Atoka County.

Marshall County

In Marshall County, Centrop Oil Co.'s No. 2 Ayers B, SE NW NE SE Section 25-7s-5e, was completed. It is a 35-bbl. well at 500-09 feet.

R. A. Godfrey's No. 3 Burge, NE SW SE SE Section 25-7s-5e, is a 50-bbl. completion at 513-22 feet. Same operators' No. 1 Purch-Ka, NW NE SW Section 25-7s-5e, was dry and abandoned at 1,010 feet.

Letz and others' No. 2 Coatsworth, 285 feet south and 605 feet east of NW cor. Section 32-5s-6e, is a 10-bbl. completion at 640-89 feet.

R. A. Godfrey has machine in for No. 1 Cox, SW SE SE NE Section 26-7s-5e, and was drilling at 80 feet in No. 4 Burge, C NW SE SE Section 25-7s-5e; Letz and others were drilling at 130 feet in No. 3 Coatsworth, SE NW NW NW Section 32-5-6e.

Stephens County

Merco Oil & Gas Co.'s No. 1 Trout, NW cor. SW Section 1-2s-8w, was estimated at 25 bbls. from sand at 1,448-60 feet. It will be tested on the pump. Same operator has made location for No. 2 Trout, SW NW NW SW Section 1.

Parts and others were rigging up No. 1 Hulshizer, NE cor. SW Section 9-1s-8w.

L. Sykes' No. 1-A Mulkey, C NE Section 16-1s-8w, is a 20-bbl. completion at 2,030-47 feet.

Mudge Oil Co.'s No. 34 Woods, a twin, NW cor. Section 26-1s-5w, is a 4-bbl. completion at 373-400 feet and the company was drilling at 155 feet in No. 35 Woods, a twin, CWL NW NW NW Section 26.

Carter County

Carter Oil Co.'s No. 3 Riddle, C SW SE NW Section 4-1s-3w, had an oil sand at 2,326 feet and sandy shale at 2,325-45 feet. It made 30,000,000 feet of gas and 2,000 bbls. of water.

Amos Drilling Co. has rig up for No. 2 Sparks-Hooks, NE SE SE Section 13-1s-3w, and Mudge Oil Co. made a location for No. 7 Majors, SW NW SE Section 35-1s3w.

Creek County

Indo Oil Co.'s No. 2 Miller, SW NE SE Section 32-18-11, Creek County, found Red Fork sand at 1,535-70 feet. It was dry and the hole was abandoned.

J. E. Crosbie's No. 3 Casey, NW cor. SE Section 3-17-8, was shot in Layton sand at 1,340-65 feet. The well made 150 bbls. in 11 hours and then the hole bridged.

Fierson & Kirchner's No. 5 Johnson, C NW SW SE Section 14-17-8, is a 5-bbl. completion at 2,227-70 feet.

Magnolia Petroleum Co. has rig up for No. 1 Tiger, NE cor. SW Section 3-17-8, Beverly Development Co., has rig up for a Wilcox sand test, No. 1 Little Head, SE SW SW Section 9-15-9.

C. C. Taylor's No. 1 Colbert, 1,120 feet south and 680 feet west of C Section 31-18-11, was dry and abandoned at 2,275-89 feet, Dutcher sand.

Tulsa and Okmulgee Counties

Claremont Oil Co.'s No. 1-A Lewis, NE NW SE Section 12-15-12, Okmulgee County, had dry Red Fork sand at 1,292-1,316 feet and was abandoned.

Bryan Petroleum Co.'s No. 2 Barnett, a twin, SW cor. Section 27-16-13, had sand at 1,016-22 feet, with 1,250,000-foot gas production; sand at 1,414-65 feet, total depth with a gas increase to 3,000,000 feet and was completed.

Crews & Armstrong's No. 4 Squire, SE NW SE Section 8-16-14, Tulsa County, had Glenn sand at 1,510-12 feet, with 1,000,000 feet of gas and at 1,537-43 feet found sand which produced 75 bbls. of oil in 12 hours.

Dodson and others' No. 1-A McKinney, NW cor. NE Section 16-15-14, Okmulgee County, was dry and abandoned in sand at 785-95 feet.

J. Summers' No. 6 McKinney, SW NW NW NW Section 16-15-14, made a 12-bbl. completion in Salt sand at 802-51 feet.

Moffett & Stekoll's No. 10 Hawkins, NW SW SE Section 6-11-12, is a 3-bbl. completion at 1,469-1,557 feet.

No new work was reported in Tulsa, Wagoner, Okmulgee nor Muskogee Counties in the course of the week.

SEABOARD OIL CO.

Meetings of the board of directors of the Seaboard Oil Co. have been fixed for the second Wednesday in February, May, August and November, at which time dividend action will be considered. This constitutes a single change, in that the dividend meeting for May is changed from the third to the second Wednesday. The annual meeting of stockholders will be held on the third Wednesday of April hereafter.

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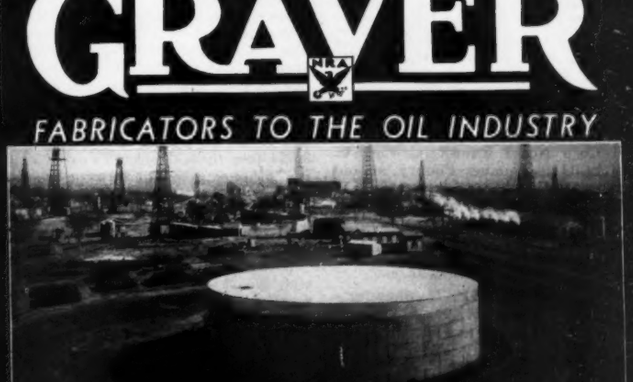

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Wildcat Wells Open Producing Areas in Kansas; New Work Suffers a Brief Severe Decline

By JAMES McINTYRE

Recently drilled wells in Reno, McPherson and Rice Counties, Kansas, which came in with very favorable showings have in the past week been completed or were being tested with good results: Rosenthal and others' No. 1 Neufeldt, Section 12-23-4w, Reno County; Continental Oil Co.'s No. 1 Graber, in Section 32-21-1w, McPherson County; Palmer, Dickey Petroleum Co. and others' No. 1 Nordling in Section 19-18-2w, in McPherson County, and Continental, Empire and Shell companies' No. 1 Lansing, in Rice County, are all new pool openers. The test of Phillips Petroleum Co. in Rooks County, No. 1 Dopita, Section 31-18-17w, was being re-acidized. It had made 88 bbls. in 2½ hours on the first acid treatment.

There was a noticeable dearth of new work in all parts of the field, but this is only a temporary happening.

Kansas Production

Estimated daily production of important pools in Kansas for the week ending June 9 and for the preceding week was as follows:

Pool—	Barrels June 9	Barrels June 2
Hollow	11,330	14,945
Ritz-Canton	13,625	13,545
Voshell	6,720	6,895
Johnson	1,922	2,090
Sedgwick County	7,885	8,010
Nikkell	5,145	5,350
Ellsworth County	3,277	2,665
Barton County	1,201	971
Rice County	11,008	10,978
Reno County	4,259	4,729
Ellis County	791	550
Kingman County	1,853	3,085
Stafford County	985	1,002
Russell County	6,105	6,220
Greenwood County	12,250	12,050
Butler County	17,990	18,100
Other pools	30,849	30,940
Total	127,195	132,125

Sumner County

Home Natural Gas Co. and Continental Oil Co.'s No. 1 Tamsk, C SE SW Section 14-34-2e, Sumner County, an old well drilled from 3,434 feet to chat at 3,440-78 feet, pumped 60 bbls. of oil and 70 bbls. of water in a 24-hour test. It was completed.

Sedgwick County

In Sedgwick County, E. B. Shawver's No. 1 Brookins, SW cor. Section 16-28-1e, flowed 222 bbls. a day on an average for three days, but after an acid treatment it flowed 331 bbls. in 21 hours with 2,000,000 feet of gas. It is producing from chat at 3,062-99 feet.

P. H. White and others' No. 1-B Gorman, CSL NW NW SW Section 6-26-1e, was acidized in Kansas City lime at 2,535 feet, total depth 2,625 feet, and pumped 85 bbls. of oil and 25 bbls. of water in 24 hours. Drilling was continued, and the hole had reached a depth of 2,659 feet.

Butler County

In Butler County, Richmond and other's No. 1-A Bronsenger, CEL NE NE SW Section 24-27-3, found Wilcox sand at 2,975-3,011 feet, and pumped 22 bbls. of oil in 24 hours.

Gore and others were spudding No. 19 Enyart, C E half SW NE Section 12-26-4, in the Tonkawa Pool.

Harry Gore and others' No. 5 Young, SE NW NW Section 27-26-7, was acidized in Kansas City lime at 2,045-2,195 feet and pumped 22 bbls. of oil and 2 bbls. of water in 24 hours. It was completed.

Kingman County

In Kingman County, Skelly Oil Co.'s No. 3 North Ratcliff, 440 feet from the south and 440 feet from the east lines of the SW Section 19-27-10w, Cunningham Pool, was acidized in Lansing lime at 3,417-92 feet and flowed 250 bbls. in 20 hours.

Greenwood and Woodson

In Greenwood County, Polhamus & Smith's No. 1 Sample, C S half S half SE Section 35-25-10, had Mississippi lime at 1,964-93 feet and is an estimated 40-bbl. well. The crew was cleaning out.

Landon and others' No. 9 Smith, SE NW NW Section 8-24-12, was completed. It pumped 15 bbls. a day at 1,722-50 feet, after a shot.

Shull Drilling Co. made a location for No. 1-B Hinchman, SW cor. NE Section 17-24-13.

Sheedy and others' No. 1 Street, NW SE NW Section 28-24-14, Woodson County, was dry and abandoned at 1,835 feet.

Bringer and others were drilling at 950 feet in No. 1 Bartoo, SW NW NE Section 30-25-4, and Sheedy and others had machine rigged up to start No. 1 Hassenpflug, NW cor. NE Section 34-25-14, a wildcat in Woodson County.

Reno County

The location for Lieberknect's test in NW cor. SW Section 1-24-4w, Reno County, has been abandoned.

Duston, Hopper and others' No. 1 Evans, C NE NW Section 25-24-8w, had 2,200 feet of oil in the hole from a formation at 3,530-39 feet, total depth, and acidized the pay.

Rosenthal and others' No. 1 Neufeldt, NW cor. Section 12-23-4w, pumped 356 bbls. of oil and 23 bbls. of water from Hunton lime at 3,615-36 feet, pay at 3,621-25 feet, and the well was completed. It had not been acidized. Sinclair Prairie Oil Co.'s No. 2 Base, C NW SE Section 26-23-4w, an old well deepened from 3,334 feet to 3,361 feet, flowed 255 bbls. in 24 hours and will be acidized. Same operator's No. 4 Base, NE cor. SE Section 26-23-4w, was acidized at 3,260-3,374 feet and pumped 71 bbls. in 24 hours.

Atlantic Oil Producing Co.'s wildcat test, No. 1 Phillips, C E half NW NE Section 22-22-6w, had the base of the Mississippi lime at 3,675 feet; Hunton at 3,885 feet and was drilling at 3,908 feet. A core taken at 3,891-3,905 feet was dry.

Derby Oil Co. and others' No. 1 Heibert, NE SW SE Section 5-22-3w, after an acid treatment in Hunton lime at 3,508-50 feet, pumped 117 bbls. of oil and 150 bbls. of water in 24 hours. It will be re-tested.

Empire Oil & Refining Co.'s No. 2 Froese, NE SE SE Section 7-22-3w, pumped 259 bbls. in 24 hours after an acid re-treatment in Hunton lime at 3,385-3,418 feet, but drilling was continued and the hole was bottomed at 3,455 feet.

Mid-Kansas Oil & Gas Co. made a location for No. 9 Duerkson, NW NE NE Section 19-22-3w.

McPherson County

Investors Mineral Development Co.'s No. 1 Kaufman, CWL NW NW Section 22-21-3w, in the Nikkell Pool, McPherson County, swabbed 135 bbls. in 24 hours from chat at 3,051-96 feet.

Mid-Kansas Oil & Gas Co. had a rig up for No. 5 Schmidt, SE NW NE Section 33-21-3w.

Continental Oil Co. and others' No. 1 Graber, NE cor. NW Section 32-21-1w, drilled on Mid-Kansas Oil & Gas Co. acreage, swabbed 435 bbls. in 24 hours and when drilled deeper to 3,249 feet swabbed 300 bbls. in 24 hours. The well was drilling at 3,259 feet. It is a Hunton lime well at 3,274 feet to the total depth, still in lime. This is a wildcat about 11 miles east of the Nikkell Pool and about the same distance south and a little east of the big Ritz-Canton Field.

Jones and others' No. 2 Flook, C E half SE NE Section 1-20-2w, was abandoned at 1,485 feet because of a hopeless fishing job.

Tom Palmer, Dickey Petroleum Co. and others' No. 1 Nordling, SE cor. SW Section 19-18-2w, a mile north of the Larsen Pool in McPherson County, was acidized in Viola lime at 3,190-99 feet, and Hunton at 3,140-50 feet, and pumped 279 bbls. in 24 hours. It was completed.

Rice County

Continental Oil Co., Empire Oil & Refining Co., and Shell Petroleum Corp.'s No. 1 Lansing, NW cor. SE Section 25-18-8w, Rice County, a wildcat 9 miles east of the Pflueg Pool, which found Siliceous lime at 3,132 feet and drilled to 3,172 feet, did not flow. The hole filled with oil and 940 bbls. of oil was swabbed in 21 hours.

Mid-Kansas Oil & Gas Co. made a location for No. 4 Proffitt, NW SW NW Section 5-20-9w, Rice County.

Gypsy Oil Co.'s No. 4 Christopher, NE NE NE Section 6-20-9w, swabbed 995 bbls. in 13½ hours from Siliceous lime at 3,227-33 feet.

Continental Oil Co.'s No. 1 Wickesham, NW SW SE Section 7-20-9w, pumped 1,292 bbls. of oil in 24 hours from a Siliceous lime at 3,280-92 feet, and was completed. The well had been acidized.

Lario Oil & Gas Co.'s No. 1 Foote, SW NE Section 7-20-9w, was acidized in Siliceous lime at 3,278-3,301 feet and pumped 30 bbls. per hour.

Same company's No. 2 McFarland, SW NE SW Section 7-20-9w, had Simpson pay at 3,260-61 feet, total depth, and the hole filled 1,000 feet with oil in two hours. Five-inch casing was being run.

Texas Co.'s No. 2 McFarland, NW SE SW Section 7-20-9w, was acidized in Siliceous lime at 3,300-19 feet but with no results. A core will be taken.

John Burton has made a location for No. 1 Wendel, SW cor. NE Section 32-19-10w. C. B. Davis and Gypsy Oil Co. made a location for No. 3 Christopher, NE SW SE Section 31-19-9w. Davis and others are building rig for No. 1 Obenhauser, SW cor. NE Section 31-19-9w.

Ramsey and others' No. 5 Gypsy Community block, NW NE SW NW Section 32-19-9w, had Siliceous lime at 3,228-67 feet, total depth. It was plugged back to 3,252 feet and swabbed 95 bbls. of oil and salt water in 12 hours. It was then acidized.

Reserve Development Co.'s No. 1 Heins, NE SW SE Section 8-18-10w, a wildcat in Rice County, drilled to 3,269 feet and the hole filled 500 feet with water. It was to be plugged back. It had a showing in Siliceous lime at 3,256-64 feet. It is 2½ miles northwest of the Orth Pool.

Russell County

In Russell County, Empire Oil & Refining Co.'s No. 1 Bender-A, NW NE NE Section 26-15-14w, pumped 127 bbls. in 21 hours from Siliceous lime at 3,340-49 feet.

Beardmore, Palmer and Gypsy Oil Co.'s No. 4 Wieland, NE cor. SE Section 36-12-16w, pumped 225 bbls. in 24 hours from Oswald lime at 3,020-3,105 feet and was completed.

Rooks County

Phillips Petroleum Co.'s No. 1 Dopita, C SW SW Section 31-8-17w, Rooks County, was re-treated with acid. It had swabbed 88 bbls. in 2½ hours when first treated. It is producing from Oswald lime at 3,312-17 feet.

Stafford County

Stanolind Oil & Gas Co.'s No. 4 Allen, NW SE SW Section 31-22-11w, Richardson Pool, Stafford County, pumped 1,391 bbls. in 24 hours in a potential test and was completed. It is producing from Siliceous lime at 3,534-48 feet.

Ellsworth County

In northern Ellsworth County, P. H. Joseph has a 500,000-foot gas well at 1,383-93 feet in No. 1 Kasper, C W half SE NE Section 6-14-9w.

Wildcat Operations in Kansas

Week Ending June 9
(Descriptions are East unless marked otherwise)

BARTON COUNTY

Company, farm and location—
Atlantic O. P. Co.'s No. 1 Straub, C SE NW Sec. 36-18-11w ..... Rigging up.
Harris & Haun and J. Brook's No. 1 Dietz, NE SW Sec. 21-16-15w ..... Location.
National Ref. Co.'s No. 1 Ingersoll, C NW NE Sec. 2-19-13w ..... T.D. 1,810 ft.; fishing.
Skelton et al's No. 1 Ott, C SE SE Sec. 16-19-14w ..... P.B. to 3,255 ft.; acidized; pumping wtr.
Walter Shearen et al's No. 1 Kempler, SE NE NE Sec. 31-18-11w ..... S.D. 250 ft.

BUTLER COUNTY

DeGenther et al's No. 1 Marnane, NW cor. Sec. 29-26-1e.. Cellar.
L. C. Hay et al's No. 1-A Bolin, SE SW SE Sec. 36-26-6e.. K.C. lime 2,159-62 ft.; acidized.
Van Meter et al's No. 1 Moore, NE cor. Sec. 5-28-4 ..... Rig.

CLAY COUNTY

Seidel Bros.' No. 1 Youkers, C S½ SE NW Sec. 21-8-4.. Spudded; fishing.

DICKINSON COUNTY

Dutch Oil Co.'s No. 1 Phillips, C NE NW Sec. 15-15-1e.. S.D. 1,335 ft.

ELK COUNTY

Diller O. & G. Co.'s No. 1-A Keys, C E½ SE NE Sec. 26-31-10 ..... Oil showing 1,644-50 ft.
Lerke et al's No. 1 Mason, C NE NE Sec. 5-31-10 ..... H.F.W. 1,564 ft.; S.D.
B. Taylor et al's No. 1 Wilson, SE NE SE Sec. 5-28-10 .. Machine.

FINNEY COUNTY

National Ref. Co. et al's No. 1 Smith, C SE SW Sec. 2-23-33w ..... T.D. 1,800 ft.; S.D. for orders.

HARPER COUNTY

R. G. Berry's No. 1 Anthony, C SW SW Sec. 17-31-9w .. Drlg. 1,535 ft.

HARVEY COUNTY

Foraker et al's No. 1 Hiett, SE SW NE Sec. 34-24-4w.... Cellar.
Wenzel et al's No. 1 Schrag, NW SE Sec. 24-23-3w ..... Rig.
Lassen, Bruce et al's No. 1 Joseph, NW NE Sec. 13-24-2 ..... Spudded and S.D.

(Continued on Page 89)

Wildcatters Active in N. Louisiana, Mississippi, Arkansas, East Texas Border and Alabama

By J. R. CRUMPTON
Staff Correspondent, Louisiana-Arkansas

SHREVEPORT, La., June 11.—Twenty new operations were reported in this division during the past week over a wide area, five separate districts in as many states being represented. The North Louisiana district led in new locations staked with 11, Arkansas reported 2, Alabama 1, Mississippi 4, and border counties of East Texas completed the list with 2 new drilling wells. In addition the division had 17 completions, of which 5 were gas wells, 4 oil wells, 2 shallow tests that were abandoned before reaching the pay horizon, and 6 dry holes.

NORTH LOUISIANA

This district continues to lead the others in wildcatting activity, with a number of large blocks reported assembled each week, but the Arkansas and Mississippi areas are getting in on the play.

In the northeastern part of Bossier Parish, the Rocky Mount Syndicate is rigging up its No. 1 Antaim Lumber Co. in Section 26-22-12. This test is located on a block of 18,750 acres and will be drilled to 3,500 feet. It is understood that a series of wells will be drilled on the acreage which has a good surface geological and geophysical report. The Rocky Mount Syndicate is composed of L. M. Moffitt, independent operator of Shreveport, the Ohio Oil Co., and the Magnolia Petroleum Co., each with a one-third interest in the operations.

C. D. Loe has assembled 20,000 acres centered by Section 20-5n-11w, Rapides Parish, and will begin a 5,000-foot test by July 1. The well is in the immediate vicinity of a wildcat drilled by the Bentley Oil Co. in 1925 to a total depth of 4,515 feet.

In Vernon Parish, the Anderson & Kerr Drilling Co. has derrick up on its No. 1 Nona Mills, Section 25-2n-9w. The operators have 7,500 acres assembled for a 5,000-foot test.

Jack Lent, of Dallas, is arranging to drill a 3,000-foot well on a block of 8,000 acres centered by Section 27-9-9, about 3 miles northeast of Robeline, in Natchitoches Parish.

Jerry L. Ryan has signed a contract to drill a shallow well to 1,600 feet in Winn Parish. The test is located on a block of 3,000 acres located in Sections 25, 26 and 36, Township 11n, Range 1w, and Section 30 and 31, Township 11n, Range 1e. Operations are to begin by July 26.

Gas Wells in Proven Areas

The four gas wells were in proven areas of as many fields. R. W. Norton's No. 1-B French, Section 34-23-16, in the Rodessa Field, Caddo Parish, was finally completed as a small gasser from 5,500-5,825 feet. The well tested 1,960,000 feet of saturated gas with 2,150 pounds rock pressure. The hole has been plugged back from 6,717 feet. In the Ouachita area of the Monroe Field, Arkansas-Louisiana Pipe Line Co.'s No. 8 Rea-Green, Section 4-18-4e, gauged 1,000,000 feet from 2,190 feet, and in the Union Parish area of the same field, Southern Carbon Co.'s No. 2 Jenny, Section 9-20-4e, gauged an initial flow of 16,243,000 feet with 610 pounds rock pressure from 2,140 feet. The three oil wells were all small pumpers in the Zwolle and Converse Fields. The former area reported two oil wells and two dry holes, and the latter had one of each.

New Tests in Alabama

In Clarke County, Alabama, the Magnolia Petroleum Co. has derrick pattern on location for its No. 1 Scotch Lumber Co., in Section 17-10n-3e. The test which is located near the towns of Thomasville and Jackson is surrounded by 70,000 acres under lease to this company.

Among the Wildcats

Two tests in DeSoto Parish developed good showings of oil and gas during the past seven-day period. In the vicinity of the old Naborton Field, S. J. Barber's No. 1 Tom Haton, Section 4-11-11, had an estimated flow of 5,000,000 feet of gas with a small amount of salt water on drill stem test from 2,645-2,731 feet. The Sunrise Oil Co.'s No. 1 Wemple, Section 14-12-11, set 2-inch tubing with packer and the well blew in with an estimated 100-bbl. flow from 2,665 feet.

A Natchitoches Parish wildcat disappointed its backers by failing to contact a paying sand to the contract depth.

Penn-Southern Petroleum Co.'s No. 1 Chopin Lumber Co., Section 4-5n-5w, checked about regularly with other wells drilled in that area and is temporarily shut down at 3,500 feet. The base of the Jackson was logged in the well at 1,288 feet, base of Sparta at 2,950 feet, top of Cane River at 3,113 feet and top of the Wilcox at 3,277 feet. In the same parish, Missouri Drilling Co.'s No. 1 Brown Lumber Co., Section 5-10-10, has spudded in and set 10-inch at 40 feet, and Plummer & McDaniel's No. 1 Walmsley, Section 45-10-8, is drilling at 2,185 feet after setting 10¾-inch casing at 1,150 feet.

Other North Louisiana wildcats follow: Bossier Parish, John T. Anderson's No. 1 Leonard, Section 19-19-13, a few miles northeast of Shreveport, is coring red beds at 3,307 feet; Howard & Baird's No. 1 Sam Gold, Section 36-20-13, is rigging up; Claiborne Parish, United Gas Public Service Co.'s No. 1 Carter Unit, Section 32-20-5, in the Sugar Creek gas area, set 9-inch casing at 4,175 feet; Sabine Parish, M. J. Kissick's No. 1 Barr, Section 6-4-12, drilling at 3,400 feet, and the same operator's No. 1 Sirmon, Section 11-4-13, has set 10-inch surface casing at 146 feet.

ARKANSAS

As this is being written, the eyes of most operators in three districts surrounding Shreveport and Texarkana are turned on E. L. Young, trustee's No. 1 Patterson, Section 5-19-28, in the southwestern part of Miller County near the town of Bloomberg, East Texas. Seven-inch casing was set at 3,635 feet with the total corrected depth at 3,665 feet. The plug has been drilled and a saturated sand, cored about one month ago, is being tested. W. F. Lacey's No. 1 Gibson, Section 30-19-27, in the Bloomberg area, has set 10-inch surface casing at 216 feet, and northeast along the same fault line, J. K. Wadley, trustee's No. 1 Dickert, Section 24-17-27, is drilling in lime at 4,414 feet. The latter test topped the Nacatoch at 1,752 feet, failed to get a show from the Woodbine, and logged the top of the red beds at 3,550 feet.

The Arkansas district reported two new locations and three completions. In Calhoun County, the Mid-American Oil Corp. has spudded in on its No. 1 Plunkett in Section 15-14-15. One new location was staked in the Miller County Field, east of Texarkana, the Magnolia Petroleum Co.'s No. 3 Olivet, Section 4-16-26. The Arkansas-Louisiana Pipe Line Co. is rigging up on its No. 1 McDonald, Section 28-1n-4e, a wildcat on a large block in Lee County. It is also reported that this company has spotted two seismographic highs on an immense block of acreage located in Ashley, Chicot, Cleveland and Drew Counties in the southeastern part of the State. No definite statement has been issued as to when this acreage will be drilled.

Other Arkansas wildcats are: Conway County, Southern Union Gas Co. and Donald Trumbo's No. 1 Feldman, Section 6-5n-17w, shut down for water at 2,865 feet; Hempstead County, A. H. Bagnelle's No. 1 Trotter & Rhinehart, Section 2-13-26, drilling at 1,580 feet; Lafayette County, Earl F. Fox's No. 1 Coleman Brothers, Section 36-16-25, is rigging up, and Douglas Lown's No. 1 Camp, Section 14-15-23, is drilling at 1,630 feet after testing dry from 1,614-19 feet.

The completions in this district consisted of one small pumper and two dry holes. The Duluth-Arkansas Oil Co.'s No. 2 Beck, Section 34-15-26, is pumping 10 bbls. daily from 2,811 feet in the Miller County Field. George W. Harper's No. 2 Bodcaw, Section 16-15-22, was abandoned as dry at 1,218 feet in Lafayette County, and E. R. Henderson's No. 2 Ogden, Section 32-18-14, Union County, failed to make a producer after acid treatment and was abandoned at 2,208 feet.

MISSISSIPPI

Alexander & Weaver's No. 1 Simpson, Section 25-6n-1e, in the Hinds County area of the Jackson Field, was completed with an estimated daily flow of 40,000,000 feet of gas from 2,416 feet for the only producer in that district. In Simpson County, the Foster Creek Oil Co.'s No. 1 Foster Creek Lumber Co., Section 12-2n-2w, was dry at 3,657 feet after having been shut down for practically one year at that depth. The other two completions, one in Scott and one in Hinds County, were both abandoned around the 800-foot level before reaching the pay horizon.

The United Gas Public Service Co.'s No. 1 Davis, Section 30-1n-5w, Greene County, on drill stem test developed six joints of drilling fluid with no show of oil or gas at 6,650 feet and the crew is coring ahead. In Franklin County, E. R. Ratcliff's No. 1 Homochitto Lumber Co., Section 20-5n-2e, is coring sand and gummy shale at 3,175 feet. One of the four new locations staked during the past week was in Rankin County, two in Simpson County and one in Washington County. The latter, Perkins & Dees' No. 1 Lee, Section 33-15n-8w, has spudded in and drilling at 175 feet. The Simpson County test, the Berry Corp.'s No. 1 R. T. Berry, Section 33-2n-4e, has set 10-inch at 60 feet and drilling at 950 feet. The test is only 75 feet west of the same company's No. 1 well which was junked a few months ago without a test.

Wildcat Operations in Louisiana-Arkansas

(Rotary operations unless otherwise designated)

North Louisiana

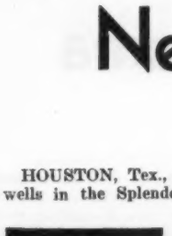
Company, well, farm name, section and block—	Remarks:
AVOYELLES PARISH	
Haas & Stokes' No. 1 Lindstrum Land Co., 690 ft. S, 980 ft. E. NW cor. Sec. 34-1n-6e	Set 12-in. 40 ft.
BIENVILLE PARISH	
Hibeltha Oil Co.'s No. 1 Woodward, 300 ft. S, 600 ft. E, NW cor. Sec. 26-15-9	Drlg. 1,618 ft.
BOSSIER PARISH	
Bossier O. & G. Co.'s No. 1 Sherrill, 300 ft. S and W, NE cor. Sec. 13-9-12	S.D.; W.O. 2,261 ft.
Ford & Hanover's No. 1 Cryer, 330 ft. S and W, NE cor. NW SW Sec. 25-19-12	S.D. 875 ft.
Howard & Baird's No. 1 Gold, 150 ft. S and E, NW cor. Sec. 36-20-13	Rigging up.
McKinney & Stewart's No. 1 Nattin, 470 ft. W, 620 ft. S, NE cor. Sec. 22-22-14	S.D. 2,865 ft.
Producers O. & G. Co.'s No. 1 Werner, 660 ft. N and W, SE cor. Sec. 7-17-11	S.D. 3,211 ft.
CADDO PARISH	
Ark.-La. P. L. Co.'s No. 1 Rodessa Land Co., 1,290 ft. N, 645 ft. W, SE cor. Sec. 23-23-16	Set 7-in. 5,514 ft.
Ark.-La.-Tex. O. & G. Co.'s No. 1 Simon, 330 ft. N and E, SW cor. Sec. 15-20-15	Bailing 1,515 ft.
W. T. Bell et al's No. 1 Bostick, 1,320 ft. E, 660 ft. N, SW cor. Sec. 12-22-16	W.O. csg. 2,520 ft.
Burkett O. & G. Co.'s No. 1 Lindholm, 400 ft. S and E, NW cor. NE SE Sec. 15-17-14	S.D. 1,046 ft.; repairing rig.
A. D. King, tr.'s No. 1 Roach, 641 ft. E, 375 ft. N, SW cor. SE Sec. 4-14-16	S.D. 2,128 ft.
A. F. Tarrier's No. 1 Muslow Oil Co., 500 ft. N, 330 ft. E, SW cor. NW SW Sec. 3-22-15	Set 10-in. 40 ft.; drlg. 1,120 ft.
CALDWELL PARISH	
Terrell & Price's No. 1 La. Central Lbr. Co., 300 ft. N, 200 ft. W, SE cor. NW NE Sec. 18-11-3e	Reaming 2,730 ft.
CATAHOULA PARISH	
T. R. Hincey's No. 1 Milleaps, Sec. 32-9-4e	Rig moved; derrick abd.
CLAIBORNE—SUGAR CREEK	
United Gas Public Service Co.'s No. 1, 1,390 ft. N, 2,890 ft. E, SW cor. Sec. 32-20-5	Setting 9-in. 4,175 ft.
DE SOTO PARISH	
L. H. Alderson's No. 1 Peek, SE cor. NW NE Sec. 25-11-13	S.D. 1,698 ft.
Berry Oil Co.'s No. 1 Wemple, Sec. 14-12-11	Setting 2-in. tubing 2,665 ft.
R. E. Collins' No. 1 Thigpen, 515 ft. N, 970 ft. E, SW cor. NW NE Sec. 29-15-12	Drlg. 1,985 ft.
Dempsey & Manziel's No. 1 Thigpen, 375 ft. S, 330 ft W, NE cor. SW NE Sec. 33-13-13	S.D. for wtr. 1,605 ft.
Gaskill et al's No. 2 Guy, 370 ft. S and W, NE cor. NW SE Sec. 3-11-13	Setting 6-in. 1,270 ft.
Hirschfield-Bailey's No. 1 Youngblood, Sec. 9-11-14	S.D. 1,502 ft.
Geo. M. LeGrand's No. 1 Fulmer, 200 ft. N and W, SE cor. NW SW Sec. 1-11-16	Reaming 1,007 ft.
J. S. Tuffree's No. 1 McGill, 450 ft. N, 150 ft. W, SE cor. SW SE Sec. 1-10-13	S.D. 2,125 ft.

(Continued on Page 88)

Splendora District Is Holding Coastal Attention; New Tests in Acadia Parish Under Way

By A. C. EASTERWOOD
Gulf Coast Bureau, The Oil and Gas Journal

HOUSTON, Tex., June 11.—The two wells in the Splendora area of eastern Montgomery County held the attention of Gulf Coast operators during the past week. The area was brought back into the limelight when Steen Drilling Co.'s No. 1 Texas Long Leaf came in for a good gas and distillate well and when Humble Oil & Refining Co.'s well to the north started testing at the critical depth.



After drilling into salt water the second time, Steen Drilling Co.'s No. 1 Texas Long Leaf was plugged back to 5,841 feet in the upper Cockfield horizon and completed for around 94 bbls. distillate daily with an estimated 30,000,000 feet of gas. The well was washed for 35 minutes and came in through casing and built up 1,700 pounds pressure, after which it was turned through one-half inch choke on tubing and it built up a pressure of 1,800 pounds. It was then shut in and built up an equalized pressure of 2,225 pounds on tubing and casing. On a 12-hour test late in the week it made 47 bbls. of distillate with an estimated 30,000,000 feet of gas through three-eighths inch choke on casing and one-quarter inch choke on tubing and showed a pressure of 2,110 pounds. At last report the distillate was reported getting darker and showing considerable coloration.

In the first hole it had sand from 5,855-77 feet and made a drill stem test in which a pressure of 350 pounds was built up in 208 seconds and in which 2½ gallons of distillate and 2 gallons of mud were recovered. It was then cored deeper and the second drill stem test from 5,873-84 feet showed one joint of brown distillate and built up 575 pounds pressure in 15 minutes. A sand was cored with a good odor of oil from 6,039-45 feet but had salt water sand from 6,045-53 feet and on a drill stem test from 6,016-53 feet it showed 23 thribbles of salt water after building up 250 pounds pressure in 11 minutes.

While running casing, operators accidentally sidetracked hole at 2,300 feet, which necessitated the drilling of the second hole. In its present hole it made a drill stem test in sand from 5,816-30 feet and in 11 minutes a pressure of 560 pounds was built up and it recovered 2 gallons of white distillate. It had sand from 6,013-21 feet with the last foot reported carrying heavy black oil, but on a drill stem test from 6,007-21 feet it showed 32 fourbles of salt water. It was then carried to 6,041 feet and has since been plugged back to its present total depth of 5,841 feet and completed in sand from 5,816-24 feet. The last hole topped the Cockfield at 5,759 feet actual or 5,628 feet subsea. The 5-inch casing was cemented at 5,801 feet.

Testing Humble Well

Humble Oil & Refining Co.'s No. 1 Texas Long Leaf, about a mile north and slightly east of Steen's well, was being watched with interest during the latter part of the week. It made two drill stem tests, both of which were failures. The latter test from 5,837-65 feet showed 23 fourbles of mud when packer failed to hold. It cored sand with a salty taste from 5,921-38 feet and at last report was preparing to make a drill stem test. It topped the Discorbis at 2,335 feet, had Heterostegina at 2,560 feet, topped Frio at 2,590 feet, drilled top of Massilina Pratti at 4,700 feet, had top of Hockley at 4,822 feet, and drilled top of Cockfield at 5,647 feet actual or 5,503 feet subsea. This is about 125 feet higher than top of Cockfield in Steen's well but when the dip between the two wells is considered, it is the general belief it is very little higher. The verdict will probably be known early in the week as to whether this well will help to discover the field or tend to condemn it to the north.

Montgomery County

Across the line in northwestern Montgomery County, Gulf Production Co.'s No. 4-C Kirby, west of the discovery well, was drilling below 300 feet. This test is just about the only direction from the discovery well that has not been condemned. Dry holes have already been drilled to the north, east, south and southwest of the discovery, only producer so far for the field. Gulf's No. 2-C Kirby was drilling 5,675 feet in the new hole. The well was formerly carried to 8,734 feet, where it had to quit when drill stem stuck in the hole and was then plugged back to 5,600 feet.

San Jacinto County

Northwest of Cleveland and across the line in San Jacinto County, Turnbull & Irwin's No. 1 Foster Lumber Co. has been abandoned as dry in salt water sand at 4,936 feet. It topped the Hockley 4,046 feet, had Camerina 4,851-61 feet and drilled top of the Cockfield 4,866 feet actual or 4,696 feet subsea.

Waller County

Also attracting considerable attention is Stanolind and Amerada Petroleum Corp.'s No. 1 Manor Heirs, in the southeast part of Waller County, which was reaming to make a drill stem test after encountering sand and sandy shale from 6,583-6,621 feet. It cored hard and soft sandy shale with shale breaks from 6,571-91 feet, cored 6,583-84½ feet, which showed fine silty sand with an odor of gas, from 6,595-6,601 feet, showed solid sandstone with 1 foot of fine gray silty sand with an odor and taste of gas, 6,601-11 feet, sand with distillate taste and a little salty, 6,611-13 feet, silty sand with shale streaks and had a good odor of gas and a salt taste, 6,616-21 feet, had 1 foot shale and laminations, 1 foot shale with sand lamination, 2 inches quartzitic sandstone, 1 foot gray porous sandstone with no odor and reported tasted slightly salty. It topped the Hockley at 5,385 feet and had Caddell 6,046 feet. The top of Cockfield was encountered 6,338 feet actual or 6,151 feet subsea.

Jasper County

Northeast of the Spurger area in Jasper County, Alpha Petroleum Co.'s No. 1 Cartwright, in the Edward Legrande Survey, was drilling 4,462 feet in the Cockfield and attracting considerable attention. It topped the Cockfield 4,436 feet actual or 4,368 feet subsea and drilled top of sand 4,457 feet. It had top of the Vicksburg 3,138 feet, top of Hockley 3,760 feet, drilled top of Massilina 3,688 feet, and went into Warrenio 3,390 feet.

Newton County

In southwestern Newton County and on the Jasper County line, Humble Oil & Refining Co. is reported to have taken a block centering around the John Wright Survey and the T. R. Smith Survey, Section 20.

Roanoke

At Roanoke, in Jefferson Davis Parish, Shell Petroleum Corp.'s No. 1 Kratzer, late in the week, was flowing at the rate of 1,132 bbls. of oil daily through 18/64-inch choke with 1,550 pounds pressure on tubing and casing. The 3½ miles of 3-inch line from the well to a loading rack at Roanoke has been completed and several tank cars of oil have already been shipped. This well proved the deep seated salt dome at Roanoke productive three weeks ago, when it came in flowing at the rate of 1,035 bbls. daily at 8,682 feet. Humble Oil & Refining Co. was rigging up on its No. 3 Devilbiss about three-quarters of a mile southwest of the discovery. Shell's No. 1 Jernigan, an east offset to the producer, was preparing to spud.

At Bosco

At Bosco in eastern Acadia Parish, Superior Oil Co. of California's No. 1 Hermandes, recent discovery, late in the week was flowing at the rate of 836 bbls. daily through one-quarter inch choke with 1,390 pounds pressure. Four of Superior's six tests for the area are already well under way. No. 1 Iseringhauser was drilling 4,965 feet. No. 1 Leo E. Kahn and others, deepest of the present drilling tests was below 5,328 feet in hard sand. No. 1 Elize Mire was drilling shale at 3,395 feet and No. 1 Richard was drilling 3,279 feet in sand and shale. Standard of Kansas was rigging up on its No. 1 Joseph Mouton, about 2,000 feet south of the discovery, was rigging up.

About 12 miles northwest of the Bosco Field, Woodley Petroleum Co.'s No. 1 Daigle, on a 14,000-acre block and located in Section 24-7s-1e, had spudded and late in the week was waiting on cement to set after setting surface casing at 1,259 feet.

Cleveland Area

East and a little south of the Cleveland area in Liberty County, H. Sample's No. 1 Security Trust Co., was drilling at 6,705 feet. It topped the Dibollensis at 6,300-12 feet and drilled top of the Cockfield 6,515 feet actual or 6,396 feet subsea. It is reported to have cored a dry sand from 6,577-83 feet.

Galveston County

About 4 miles south of Dickinson in Galveston County, George K. Spoor's No. 1 Maco Stewart, in the W. K. Wilson Survey, was coring at 5,824 feet. It is reported to have had sand showing gas from 5,778-5,808 feet. About 3 miles north of the Spoor well, Humble Oil & Refining Co.'s No. 1 Maco Stewart, in the John Sellers Survey, was drilling at 2,055 feet in shale. Although neither of these wells is near the important stage,

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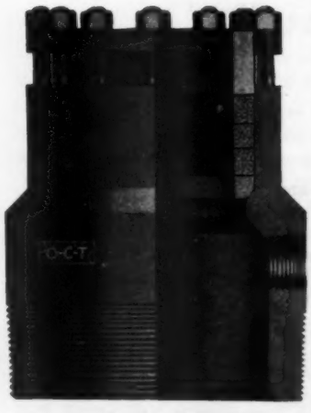

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Austin County

In the northwest corner of Austin County, Sun Oil Co.'s No. 1 Zetik, in the S. M. Williams Survey, is reported to have been abandoned as dry at 3,300 feet. On a drill stem test from 2,823-2,903 feet through three-eighths inch choke on bottom it showed 23 fourbles of fresh water with a slight show of gas in 15 minutes. On another drill stem test from 3,053-68 feet it showed 26 fourbles of fresh water with a slight show of gas through three-eighths inch choke in 15 minutes. It topped the Hockley at 1,715 feet, had top of Dibollensis at 2,305 feet and encountered top of Cockfield at 2,510 feet actual or 2,190 feet subsea.

Harris County

In west central Harris County, General Crude Oil Co. has staked location for No. 1 Rorick estate and late in the week was rigging up. It is 5,606 feet from the north line of John C. Ogburn Survey and 1,546 feet from the east line of the 1,426-acre tract. Just west of Houston and near the city limits, Loring Oil Co. has spudded No. 1 Westmoreland. It is in Block 33 of the Westmoreland Addition, and scheduled to be carried to 6,000 feet unless production is found at a lesser depth.

At Goose Creek in Harris County, Edwards Drilling Co.'s No. 1 Mathews has been completed for a 175-bbl. pumper at 4,015 feet. L. H. Puckett's No. 1 Scott was cutting and pulling screen after testing salt water at 4,571 feet. This well flowed for a short time at 4,026 feet but sanded up. Simmons' No. 1 Kerwin Mitchell, about 800 feet northwest of Mirimar's No. 1 producer, was drilling at 5,300 feet. On a drill stem test from 4,698-4,760 feet it showed 1,050 feet of oil, salt water and gas in 12 minutes.

Hardin County

At Sour Lake in Hardin County, Humble Oil & Refining Co. has staked location for No. 1 Kirby and others 140 feet east of the west line and 300 feet south of the north line of the old Gulf 170-acre tract, south of Minor Oil Co.'s tract in the S. Jackson Survey. Alpha Petroleum Co.'s No. 1 J. M. Weiss, southwest offset to Parr's well, was drilling at 1,800 feet in shale. Parr and others' No. 1 Benard, west edge of the old Sour Lake Field, was still shut down at 4,800 feet after plugging back from 7,061 feet.

Jackson County

Encio Gas Co.'s No. 1 Toney, about a mile from the town of Vanderbilt in Jackson County, which provided the existence of a new producing area several weeks ago when it came in good for over 500 bbls. daily of 32.4 gravity oil, was tested during the latter part of the week and flowed 526 bbls. of oil with a reported 1¾ per cent water, but not salt water. Encio Gas Co.'s No. 1 Siedel & Simmons was drilling below 2,000 feet. It is a northeast offset to the discovery. During the past week the Railroad Commission decreed that wells in the area should be spaced every 933 feet on the same property and 466 feet from lease lines, thus creating a 20-acre drilling and proration unit. The gas-oil ratio was set at 1,500 feet of gas ber barrel of crude oil produced.

It is reported the State will soon call for bids on lands claimed by the State under the Menefee Lakes in the Ramon Musques leagues in the area. This includes two lakes on a lease of 1,000 acres which the Humble Oil & Refining Co. leased from Encio Gas Co. on the Toney land.

Among recent lease deals in Jackson County, Humble Oil & Refining Co. is reported to have purchased from Atkins & O'Neil Blocks 139 to 154 inclusive, and Blocks 163 and 164 in the I.&G.N. R.R. Survey. Southwest Oil Co. is reported to have taken 40 acres of the A. Stephen tract in the George Ewing Survey for $60 per acre. Southeast of Vanderbilt, Stanolind Oil & Gas Co. is reported dealing for 1,000 acres of the La Ward land. On the Jackson and Calhoun County lines, Gillette Hill and associates are reported to have taken about 4,000 acres of the Traylor ranch with a drilling obligation.

Refugio County

In the Bonnie View area of Refugio County, Heard-Holland Oil Co.'s No. 1 Peck has been attracting attention. On a drill stem test from 5,330-37 feet it built up a pressure of 400 pounds in 11 minutes through one-quarter inch choke on top and five-sixteenths inch choke on bottom. It then cored sandy shale with an odor of oil and gas from 5,337-51 feet and on a drill stem test it built up 220 pounds pressure in 11 minutes and showed 100 feet of mud cut with gasoline, and some fresh water through one-quarter inch choke on top and five-sixteenths inch choke on bottom. At last report it was running casing.

Another wildcat test in Refugio County showing good indications of making a producer was Quintana's No. 1 O'Connor, about 8 miles northeast of the town of Refugio and 3 miles southeast of the Greta Field. On a drill stem test from 4,912-40 feet it built up 875 pounds pressure in five minutes and showed 5 feet of mud cut with gasoline through one-quarter inch choke on bottom and five-sixteenths inch choke on top. On another drill stem test from 4,909-50 feet it built up 550 pounds pressure in five and one-half minutes and showed 12 feet of mud cut with oil and recovered 3 gallons of 50 gravity oil. At last report it was coring ahead at 4,950 feet.

Both of Bunte's wells in the Bonnie View district will be carried to 6,000 feet. No. 2 Rook is shut down at 5,009 feet after completing its contract which called for 5,000 feet and No. 3 Rook was shut down at 5,010 feet after completing its contract depth.

Walker County

At New Waverly in Walker County, George W. Strake's No. 1 G. P. Thompson, in the Jackson Crouch Subdivision of the Jose Maria de la Garza Survey, had spudded and set surface casing. The Gulf Production Co. is reported to have contributed $4,800 to the drilling of the well.

Chambers County

About 1½ miles south of Hankamer Field, in Chambers County, Miramar Oil Co.'s No. 1 George Stengler has been abandoned as dry after deepening from 6,025 feet to 6,392 feet.

Polk County

Between the Livingston and Sunshine areas in Polk County, Werby Petroleum Co.'s No. 1 Whittiforth has been abandoned as dry with total depth of 4,580 feet. A Schlumberger test made of the well showed salt water.

Calhoun County

In Calhoun County, Heep Oil Co.'s No. 1 Welder has been abandoned as dry with total depth of 6,500 feet. Heep's No. 2 F. Welder was coring sand at 3,911 feet. Continental Oil Co. is reported to have selected 4,000 acres out of the 17,000 acres it held in option of the Welder ranch. Consideration was reported at $2.50 per acre. Continental Oil Co.'s No. 1 Moody, between Seadrift and O'Connor, was waiting on cement after cementing 13⅜-inch casing at 1,472 feet.

(Continued on Page 87)

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Gulf Coast Fields and Wildcats

Week Ending June 9

RACCOON BEND—AUSTIN COUNTY

Company, farm and location—	Remarks:
Humble O. & R. Co.'s No. 3 Effie Kearns, 270 ft. W of E line, 325 ft. N of S line of 175-ac. lease in W. C. White Sur.	Drlg. shale 2,037 ft.
Humble O. & R. Co.'s No. 5 L. B. Sherwood, W. C. White Sur., Abst. 101	T.D. 3,383 ft.; installing pumping unit.
Humble O. & R. Co.'s No. 2-B Remmert	Drlg. hard shale 2,060 ft.
Humble O. & R. Co.'s No. 13 Thompson	Drlg. shale 3,345 ft.

DANBURY—BRAZORIA COUNTY

Shell Pet. Corp.'s No. 3 Haury, 800 ft. SE of No. 2 in line with No. 2 and No. 1 Blakely-Winston, H.& T.B. Sur. No. 13	Derrick.

DAMON MOUND—BRAZORIA COUNTY

Sinclair Prairie Oil Co.'s No. 4 Lucas, A. Darst Sur., 125 ft. N S line, 25 ft. E W line, Blk. 15	Drlg. sandy shale 1,169 ft.
H. Wisdom's No. 2 fee, A. Darst Sur., 50 ft. E W line and 200 ft. N of No. 1	Drlg. shale 961 ft.
H. Wisdom's No. 1 Proctor, 40 ft. out of SW cor. Blk. 1, A. Darst Sur.	Derrick.

MANVEL—BRAZORIA COUNTY

Texas Co. et al's No. 1 Alice & Ritchie, 265 ft. S, 41 deg. 36 min. W, 330 ft. N, 47 deg. 53 min. W of E cor. of Lot 4, Div. E, N. P. Little Sur.	Coring sand show oil 3,996 ft.; T.S. 3,993 ft.
Texas Co.'s No. 10-B Belcher, 2,658 ft. N, 48 deg. 9 ft. W and 330 ft. N, 41 deg. 51 ft. E of S cor. of lease in H. N. Little Survey	Coring hard sand 4,008 ft.
Texas Co.'s No. 1 Boff, 265 ft. from S and 325 ft. from W line of C of Lot 24, H.T.&B. Sur. No. 74	T.D. 7,609 ft.; stuck drill pipe.
Texas Co.'s No. 1 John Groce, 200 ft. E of W line, 200 ft. from N line at right angles	T.D. 1,131 ft.; W.O.C.
Texas Co.'s No. 1 W. D. Morrison, 743 ft. from N and 441 ft. from E lines of lease, C of Lot 33, A.C.H.&B. Sub., Sec. 91	Drlg. shale 5,665 ft.

(Continued on Page 89)

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Gilmer County Producer Holding at 400 Barrels; West Virginia Find Stimulating Activity There

By STAFF CORRESPONDENT

PITTSBURGH, Pa., June 11.— The producer brought in on the A. H. Blackshere farm in Center district, Gilmer County, by Godfrey L. Cabot, Inc., which started producing at the rate of 50 bbls. in hour, continued as a fair well and averaged better than 400 bbls. a day. This well, drilled from the Salt sand to the Berea sand, together with the fair wells on the Mary A. Stump farm and the Emma Ryan farm, has stimulated activity.

The Hope Construction & Refining Co. has completed a rig for a test on the Leola Blackshere farm about 700 feet from the A. H. Blackshere well. The same company is nearing the Berea sand in No. 3,569 on the Mary A. Stump farm and is building a rig for No. 3,570 on the same farm. McCall and others have started drilling on the E. G. Rohrbaugh farm. Godfrey L. Cabot, Inc., is ready to drill deeper the old No. 2 on the J. P. Norman farm.

There were 15 wells completed in the lower eastern fields during the week, of which 10 were producers and 5 gas wells. There were also five dry holes. The majority of completions were in Southeast Ohio, scattered over the entire district.

SOUTHEAST OHIO

In Guernsey County, E. C. Quillan and others completed a second test on the Verna A. Quillan farm in Section 10, Wheeling Township. It was drilled in the Niagara lime at a depth of 3,585 feet and produced 20 bbls. the first day, natural.

In Harrison County, 1 mile west of Scio in the old Scio Field, in Section 2, North Township, Ohio Oil Co. completed a test on the O. R. Amos farm in the Berea sand at 1,174 feet. It produced 3 bbls. the first day after shot from the second pay.

In the shallow sands of Medina County Preston Oil Co. completed No. 21 on the Bertha B. and J. J. Parent farm, Tract 16, Lot 5, Chatham Township, showing for 10 bbls. a day after shot in the Berea grit at a depth of 325 feet.

In Monroe Township, John Lumbates and others completed a test on the J. B. Hawkins farm, Section 2, Franklin Township, in the Berea grit at 1,940 feet. It produced 4 bbls. the first day, natural, which was increased to 6 bbls. after shot. In Benton Township, B. F. Grewe drilled a test on the J. M. Ridgeway farm in Section 13 in the Keener sand at a depth of 1,576 feet. It produced 2 bbls. the first day after shot.

In Morgan County, J. F. Meiswanger and others completed No. 3 on the Harry M. Taylor farm at Joetown in Section 5, Malta Township. It is a shallow First Cow Run producer at 245 feet and will make about a half barrel pumper. In Section 2, Windsor Township, Carl Ross and others drilled a test on the Esto Ross farm through the Cambridge lime. a total depth of 542 feet, and it was a dry hole.

In Muskingum County, NW Section 7, Jackson Township, Pure Oil Co. drilled a test on the J. Ashcraft farm in the Clinton sand to a depth of 3,200 feet. It is producing about 10 bbls. of oil along with about 24 bbls. of salt water a day. An effort is being made to shut off the salt water before shooting the hole.

In Noble County, B. E. King drilled No. 10 on the L. R. Crum farm, NW Section 7, Enoch Township, through the Buell Run sand at a depth of 226 feet. It was dry with no showing at all.

In Vinton County, Co-operative Oil Co. completed No. 5 on the Garfield Brooks farm near Bollins Mills in Section 3, Knox Township. It is a very light gas well in the grit at 1,220 feet.

In Washington County the Harry R. Buchanan estate completed No. 40 on the John A. Herlan and Louisa J. Mendenhall farm in SW Section 32, Independence Township. It produced 3 bbls. the first day after shot in the Mitchell sand at 545 feet. In Section 26, Wesley Township, near Dale, R. W. Turney and others completed a second test on the John Brower farm in the Peeker sand at a depth of 483 feet, showing for a 3-blb. pumper. In the southeastern part of Section 1,078, Palmer Township, M. A. Martin and others drilled No. 5 on the M. A. Martin farm through the Cow Run sand, total depth 630 feet, and it was a dry hole.

WEST VIRGINIA

There was only one producer completed in West Virginia during the week. In Roane County, W. B. Heeter completed a test on the Maude Knopp and others lease in Curtis district in the Salt sand at a depth of 1,792 feet, estimated good for 2 bbls. a day.

As a result of the recently increased allowable, reconditioning work is still being pushed in this district and with fair results. The Lost Run Pool in Clay district, Ritchie County, is declining rapidly and the new production from reconditioning and recent wells is hardly offsetting that decline.

Gas Wells

There were two fair gas wells in Calhoun County. In Washington district, Eastern State Gas Co. completed a second test on the A. J. Boggs farm in the Salt sand at a depth of 1,472 feet. It gauged about 1,500,000 feet a day natural. In the same district but on the Curtis and Ella B. May farm, Everett Starcher and others completed a test in the Salt sand at a depth of 1,528 feet. It gauged over 800,000 feet a day natural.

In Cabell County, Graham Gas Co. completed a test on the Frank Marchetti farm in Guyandotte district in the Berea sand at a depth of 2,705 feet, showing for about 250,000 feet a day.

In Gilmer County, slightly west of the line of production, Mountain Iron & Supply Co. drilled a test on the A. H. Stump farm in Center district through the Berea sand to 2,507 feet and found it dry.

In Ritchie County, W. Bickerstaff completed a test on the Martin McMullen heirs farm in Clay district in the Big Injun sand at 2,116 feet, showing for about 120,000 feet of gas a day and about 1 bbl. of oil.

Drilling in West Virginia

In Calhoun County, Mudlick Oil & Gas Co. has a rig standing for a second test on the Almeda Meadows farm in Lee district. In Washington district, Ohio Valley Gas Corp. has part of the material on the ground on the N. L. Norman farm. Harley Jarvis and others have a location on the L. H. Crookshank farm. In Sherman district, F. F. McIntosh is drilling at his No. 4 location on the O. S. Bennett farm. R. Fowler and others are drilling on top of the Injun sand in a second well on the Lafayette Stump farm. H. B. Scott has the material on the ground on the P. Fling heirs farm. In Sheridan district, Cain and Rothwell are rigging up No. 1 on the Hale Knight farm. In Center district, Starcher and Richards are drilling at 420 feet on the James Wilson farm.

In DeKalb district, Gilmer County, Starcher and Richards are down 2,115 feet on the O. C. McQuain heirs farm. McCall and others are drilling at 1,750 feet in No. 3 on the Lee Gainer farm.

In Roane County, Henderson Oil Co. is building a rig on the E. S. Ball farm in Curtis district. This company has a location on the George L. Ball farm and H. F. Parsons and others one on the M. B. Lattimer farm. In Spencer district, J. D. Silcott and others shut down for water at 675 feet on the John B. Lukens farm. In Smithfield district R. L. McCulty and others have reached 1,738 feet on the O. M. Young farm, a test. In Reedy district, Law and Lester have started drilling on the O. M. Tatterson farm.

In the Lost Run Pool, Clay district, Ritchie County, the following wells are drilling: Robert W. Elder and others are down 700 feet on the Leonard heirs farm; Hinton Farm Oil Co. has reached 900 feet in No. 2 on the Edgar Hinton farm; Richards Farm Oil Co. is drilling at 1,790 feet in No. 6 on the Frank R. Ball farm and at 820 feet in No. 7; Glen F. McBurney and others have reached 530 feet on the Hugh Ball farm, No. 2.

In other parts of Ritchie County, the following work is noted: In Grant district, Swingle Brothers are rigging up on the Grissel Vincent farm, Horner and Hank have a location on the J. H. Alkire farm. L. N. Rinehart has a location on the W. E. Rinard farm. Gillman & Co. have finished a rig on the Stephen Gillman farm. Petroleum Producing Co. is down 1,100 feet on the Jennie Carroll farm. In Murphy district, Everett Starcher and others are down 400 feet on the Daniel Wilson farm. Litton & Lewis Gas Co. has rigged up on the School Lot. Ira Roberts and others have reached 1,550 feet on the W. T. Baker farm. In Clay district, Howard Robinson is down 1,710 feet on the William Flanigan farm. Cottrell and others are drilling at 900 feet on the M. S. Riggs farm. John Deem and others have started drilling on the L. E. Robinson farm.

In Wood County John Leeton and others have reached 1,350 feet in No. 5 on the John Coplin farm in Walker district. In Wayne County, J. H. Wilson is drilling at 1,900 feet on the Hamilton Land Co. in Ceredo district. In Lincoln County, Kanawha Gas & Utilities Co. has rigged up on the W. S. Snodgrass farm in Sheridan district.

SOUTHWEST PENNSYLVANIA

There were no completions in Southwest Pennsylvania during the week and one operation was a dry hole. In East Findley Township, Washington County, C. P. Levier and others drilled a test on the Vera M. Montgomery farm, mapped as the James Marshall farm, through the Gordon Stray sand at 2,869 to 2,903 feet and it was dry. The test was continued to the Fifth sand and a total depth of 3,059 feet without striking pay. The location is 4,500 feet northeast of the producer on the J. N. Clutter farm. This well was recently shot and returned the production to about 70 bbls. a day.

In this township, Union Gasoline & Oil Corp. is drilling at 1,660 feet in No. 3 on the J. N. Clutter farm, offsetting Meyers, Hoskinson's No. 1, the producer, and also at 1,665 feet in No. 4 on the same tract. This well offsets Myers, Hoskinson and others' No. 2 on their narrow J. N. Clutter strip which is drilling at 2,225 feet. Natural Gas Co. of West Virginia is drilling two wells in this township. On the William Bedillion farm, No. 1 is drilling at 1,360 feet and on the Leroy Ealy farm No. 1 is down 2,550 feet.

In Amwell Township, Washington

(Continued on Page 94)

Repressuring and Reconditioning Work Considered in Kane to Butler District

By ROBERT C. CONINE

OIL CITY, Pa., June 11.—Without the current water flood development of the Bradford and Allegany Fields in McKean County, Pennsylvania, and Cattaraugus County, New York, the Pennsylvania grade oil industry could scarcely be more than local in character, a study of comparative crude oil production figures for the grade districts makes clear. The estimates on the future life of the two fields, at the present rate of output, vary from 25 years up to nearly 40 years. And then it is pointed out that the 60 or more per cent of the original oil content left in the sand after water flooding may be made available by an improved method of secondary recovery.

In the Kane to Butler district there is a definite move throughout the various fields to install repressuring equipment and recondition old wells to increase production. In the Clarendon Field some progress is reported in water flood operations. Water drive is also being tried experimentally in a number of Speechley sand wells near Butler.

Production record for the Pennsylvania grade crude oil region in the first five months of 1934 follows. Total production includes output of fields in the following districts: Allegany, Bradford, Kane to Butler, Southwest Pennsylvania, Southeast Ohio and West Virginia. Figures are in barrels of 42 gallons each.

Week ending—	Total output	Bradford	Allegany
January 6	442,050	212,450	51,800
January 13	450,450	220,150	53,200
January 20	440,650	209,300	49,700
January 27	448,700	221,200	51,100
February 3	394,800	197,400	42,000
February 10	410,200	203,000	49,000
February 17	397,950	201,950	44,100
February 24	410,550	206,150	48,650
March 3	381,500	319,050	44,450
March 10	433,300	222,250	55,650
March 17	456,400	217,700	51,450
March 24	440,650	219,450	48,300
March 31	459,550	226,100	53,550
April 7	546,750	222,600	54,250
April 14	459,550	223,300	50,750
April 21	458,850	232,400	50,750
April 28	459,550	226,450	54,250
May 5	472,850	241,150	53,550
May 12	466,200	233,100	54,600
May 19	463,750	235,900	55,300
May 26	471,100	243,600	52,500
June 2	482,300	246,050	56,000
Total	9,757,650	4,858,700	1,132,900

Contrasting elements of drought and electrical storms have menaced oil properties in the Kane to Butler district for more than a month. Fire sweeping a dozen leases in this period caused comparatively little damage because of the accessibility of the properties to fire-

(Continued on Page 94)

Eight New Completions Reported in Michigan; One 5,000 Barrel Well Flows Wild for Time

By PAUL A. ELLIOTT
Staff Correspondent, Michigan Fields

MUSKEGON, Mich., June 11.—After showing a slight decline in potential but an increase in actual daily production during May over the Federal allowable for the first time since a limit was established, Michigan added more than 9,000 bbls. of daily production by eight new completions, all in the Porter Township Pool, and large increases in two wells previously drilled into the pay but boosted by acid treatment.

Five of the wells drilled into the Dundee during the past week were comparatively small and probably will be treated. The other three new producers and the two previously drilled in but treated with acid accounted for about 8,900 bbls. of the week's total of 9,250 bbls. of new initial.

One 5,000-bbl. well brought in by the Pure Oil Co. in Section 21, Porter Township, ran wild for several hours after knocking off a master gate valve when it came in flowing more than 200 bbls. an hour. It indicated the high pressure is not yet entirely off the Porter Pool.

Because of the increased number of wells and the subsequent increase in daily runs, exceeding the Federal allowable of 31,300 bbls. for May and even topping the increased allowable of 3,800 bbls. a day effective June 1, the percentage of proration in the Porter Pool was reduced from 7 to 5 per cent for all potentials over a minimum of 100 bbls.

New Producers

The largest new well of the week was Pure Oil Co.'s No. 4-B W. W. Hoyt, SE SW NW Section 21-13n-1w, Porter Township, Midland County, which came in for about 5,000 bbls. a day after topping the Dundee at 3,376 feet and drilling to 3,426 feet. It flowed wild for several hours after completion. Pure's No. 10 Walter Neitzke, SW SW NE Section 21, Porter Township, made 170 bbls. in the first four hours and was estimated good for about 1,000 bbls. a day in the Dundee at 3,425 feet. Fred Turner and others' No. 1-B Eugene St. Johns, NW SE SW, also Section 21, made about 700 bbls. a day in the Dundee topped at 3,376 feet and drilled to 3,428 feet.

Charles Teater's No. 8 Joseph M. Wale, SW NW NW Section 22, which made about 75 bbls. natural, was boosted to 1,400 bbls. a day by treatment and J. S. Braden's No. 2 William McCallum, SE SE SE Section 20, increased from 50 bbls. natural to 804 bbls. a day after treatment.

Pure Oil Co.'s No. 2-B J. B. Rayner, NW NW NW Section 18, Porter Township, made about 170 bbls. a day, drilled to 3,446 feet as an offset to Gordon Oil Co.'s No. 1 Greene in Section 13, Jasper Township, a half mile west extension which has been pumping about 50 bbls. a day for several months. Empire Oil & Refining Co. completed No. 2 Mabel Finch, SE SE SE Section 20 for 70 bbls. natural topping the Dundee at 3,383 feet and drilling to 3,419 feet. It will be acid treated.

McClanahan Oil Co.'s No. 1 Eliza Brew, NW NW SE Section 20, topped the Dundee at 3,405 feet and hit the pay at 3,428 feet for about 75 bbls. a day. It also will be treated. Sun Oil Co. drilled in a three-quarters mile south extension in No. 1 Frederick, NW NW SE Section 27, which topped the Dundee at 3,399 feet and hit the pay sands 51 feet in at 3,450 feet. It filled up 1,000 feet with oil and will be treated. Pure Oil Co. drilled into the Dundee at 3,420 feet in No. 2 Everett Kleinhans, NW SE NE Section 20, but was to be drilled a little deeper before taking a potential. Bradner and Vaughn's No. 1 Brennan, NW SW SE Section 27, a quarter mile south of Sun-Frederick, which had 2,000 feet of oil in the hole but would not flow, was reported producing about 30 bbls. a day on the pump after acid treatment. Richard Hall's No. 1 Bond-Harris, SE NW SE Section 7, rated at 50 bbls. natural, also will be treated. Pure Oil Co.'s No. 1 James Hicks, SW SW SW Section 14, the first well in this section, estimated good for 1,000 bbls. a day when brought in a week ago, was given a rated potential of 1,199 bbls. Success in this well is expected to start operations on Fred Turner's No. 4 Baxter, NE NE NE Section 22, a diagonal offset.

New Gasser

Atha Oil Co. completed a 2,000,000-foot gasser in the Michigan series in No. 1 Regan-Mahar, C NW NW Section 36-16n-4w, Vernon Township, Isabella County. Two Broomfield Township, Isabella County, gas tests were nearing completion in the Michigan sand: Guy M. Obenauer, trustee's No. 1 J. Diehl, C SE NE Section 15, shut down above the sand and R. L. Hill's No. 1 Mitchell-Keeler, NW NW Section 9, drilling below 1,300 feet. Two other gas tests were active in Broomfield Township, while Isabella Oil Development Co. was drilling No. 3 Bartlett-McClintic as a Dundee oil test.

Vernon Township

In Vernon Township, W. J. Bernier, or the Mohawk Oil Development Co.'s No. 1 James Duncan, NE SW SW Section 9-16n-4w, may be forced to skid the rig because of a bad hole at about 3,250 feet. Two wells nearing completion in this area are Templemayr & Tope's No. 1 Woods, SW SW NW Section 22, and Mellon-Pollock Oil Co.'s No. 2 Leo Smock, NW NE Section 26.

Jasmid Oil Corp.'s No. 1 Anton Wezensky, SE NW SE Section 16-15n-3w, Denver Township, Isabella County, and Ohio Producing & Refining Co.'s No. 5 Epple, Section 19, are reported nearing the Dundee. Two other Denver wells were active and two more starting. Jasmid Oil Corp.'s No. 1 Fred Pietscher, SE SW SW Section 28-13n-2w, Jasper Township, Isabella County, about 6 miles west of production in the Porter Pool, was about ready to run casing above the Dundee.

McClanahan Oil Co.'s No. 1 A. O. Guilford, NE NE NW Section 29-22n-2e, West Branch Township, Ogemaw County, had been drilled to about 3,550 feet as a deep test of the Monroe formation in this section with little success. A show of gas was reported in the Monroe. Four other Ogemaw wells were active including C. A. Perry's No. 1 Wobig heirs to be drilled to the Dundee. Youman and Burke's No. 1 La Fever, Section 32, Sherman Township, was expected to test the Michigan gas sands this week.

Wittmer Oil Co. is drilling one wildcat in Isabella Township, Isabella County, and has taken out a permit for another.

Single wildcats in Porter, Jasper and Greendale Townships, Midland County, and one Greendale project in proven territory also were active but not nearing completion.

Leading Wildcat Territory

The most active wildcat area in Michigan just now is the Mecosta Montcalm County section where 11 tests were drilling, rigging or moving in and several new locations proposed.

Daily Oil Co.'s No. 1 Blair, SW SE SE Section 11, Ferris Township, was the deepest of these tests cased through the Marshall and drilling. Four other tests in Sections 3, 10, 13 and 17, Home Township, were drilling including: Daily Oil Co.'s No. 3 Christensen heirs, Section 3; Pure Oil Co.'s No. 1 Hansen, Section 10; Theodore Oil Co.'s No. 1 Sherwin, Section 13, and Rex Oil & Gas Co.'s No. 1 Johnson, Section 17.

Old Dutch Oil & Gas Co.'s No. 1 Fargar, Section 11, Belvidere Township, Montcalm County, is rigged up and ready to start, while Walter and Miller's No. 1 Durbin, Crystal Township, same county, will move in soon.

Taggart Brothers, Inc. are waiting for the arrival of a rotary rig to start No. 1 McKeough, Section 7, Austin Township, Mecosta County, a gas test, while Bryan and Martin are moving in for No. 1 Sheets in Milbrook Township, also Mecosta.

Columbia Oil & Gas Co. will make location soon for a second test on a block of 4,000 acres where they recently brought in a 7,000,000-foot gasser in Hinton Township, Mecosta County.

Western Michigan

Reed Oil Co., of Muskegon, was drilling at more than 1,800 feet in No. 1 William J. Brinen wildcat, located SW SW NW Section 13-13n-16e, Otto Township, Oceana County. Drillers are expecting to reach the upper Traverse at about 2,000 feet.

Muskegon Oil Corp. is reported planning a new Muskegon County wildcat in Fruitport Township, several miles southeast of the original Muskegon Field.

A. L. Lyon's No. 1 H. Woodworth, SE SE SE Section 5, Benton Township, Eaton County, near Charlotte, was shut down at 3,083 feet in the Sylvania formation from where it will be continued as a deep test.

New Locations

Eight permits, including three in Montcalm County, three in Midland and two in Isabella County were issued. The three new locations in Montcalm County are in three different townships: Northern Oil & Gas Corp.'s No. 1 George McGilvery, C NW NE Section 34-12n-5w, Richland Township; Rex Oil & Gas Co.'s No. 1 H. P. Albaugh, NE NW NE Section 34-12n-6w, Home Township, and Tope, Blunt and Voorhees' No. 1-A Neff ranch, SW SE NW Section 22-11n-6w, Day Township.

The two in Isabella County are: Wittmer Co., Inc.'s No. 1 Thomas Wing, C W half NW NE Section 13-15n-4w, Isabella Township, and Park Oil Co.'s No. 1 Edwin L. and Rachel A. Russell, NW NE NW Section 22-16n-4w, Vernon Township. Gordon Oil Co.'s No. 2 R. Greene, SE NE NE Section 13-13n-2w, Jasper Township, Midland County, and two new Porter Township locations, Strange & Fortney's No. 5 J. W. Campbell, SE NW SE Section 18-13n-1w, and same company's No. 6 J. W. Campbell, SE NE SE Section 18, complete the record.

Fred Stork is reported to have made a tentative location in Section 28, Richland Township, Midland County.

Report More Completions in Kentucky Than for Any Period in Two Years

By GEORGE A. WHITNEY
Staff Correspondent, Central West Fields

FINDLAY, Ohio, June 11.—But two wells were completed in the old Trenton lime fields, but the Central Ohio division made up for that field and Kentucky had more completions than for several months.

In the Lima Field of northwestern Ohio, two dry holes were found: C. H. Benke's No. 1 on his own farm, in Section 35, Woodville Township, Sandusky County, and Kiner and others' (Wyanco Oil Co.) No. 2 Edward G. Huffman farm, NW Section 34, Crane Township, Wyandot County, at a total depth of 1,492 feet.

CENTRAL OHIO

Central Ohio proved the most active area of the Central West Field, with 17 completions, comprising 6 oil wells, with 193 bbls. initial, 4 dry holes and 7 gas wells.

In Ashland County, Robison and others' No. 1 Elza S. Gharst farm, Section 10, Lake Township, was dry. Ohio Fuel Gas Co. drilled a dry hole in No. 1-5,793 on the B. D. Swope farm, Section 22, Jackson Township, at 2,915 feet. Same company has a rig for No. 1-5,821 on the Vernon Utz farm, Section 33, Jackson Township. Same company's No. 1-5,822 is starting on the A. and M. Shafer farm, Section 12, Vermillion Township.

In Medina County, Preston Oil Co.'s No. 21-1,550 on the J. [illegible] Parent farm, Lot 5, Chatham Township, produced 10 bbls. initial at 280 feet. Same company's No. 22, same farm, is drilling, and same party is drilling No. 19, a new location for Harry M. Beach farm, Section 9, same township.

In Coshocton County, Pure Oil Co.'s No. 3 Roy Hayes farm, Section 5, Perry Township, produced an initial of 115 bbls. at a depth of 3,213 feet. Ohio Fuel Gas Co. is drilling No. 3-1,546 feet on the R. H. Giffen farm, Newcastle Township.

In Licking County, Charles Vaughn's No. 9 Dora Dustheimer farm, Section 2, Franklin Township, produced 2 bbls. initial at 698 feet. Ridgeway and others are drilling No. 4 on the Bessie Hoyt farm, Section 12, Perry Township. Whitehill Oil Co. is drilling No. 20 on the Alice Ashcraft farm, Section 29, same township.

In Muskingum County, Pure Oil Co. is drilling No. 3 Frank McKee farm, Section 6, Jackson Township. Same company is drilling No. 2 W. B. and F. Hoover heirs farm, same section, and No. 1 Oscar Mikesell farm, Section 7, same township.

Stark County

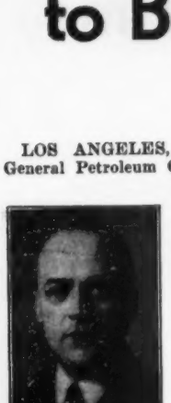
In Stark County, Brendel Producing Co. is drilling on the I. and E. Drowns farm, Section 4, Osnaburg Township. East Ohio Gas Co.'s No. 1 K. W. Don-

(Continued on Page 87)

World's Deepest Well, in California, Promises to Become the Deepest Crude Oil Producer

By L. P. STOCKMAN
Staff Correspondent, California Fields

LOS ANGELES, Calif., June 9.—General Petroleum Corp. is putting the finishing touches on what may turn out to be the world's deepest producing well and preparations are going forward for an immediate test. No. 1 Berry, the well in question, is located in the South Belridge Field of Kern County and at 11,377 feet is by far the deepest well ever drilled. The production test to be conducted on No. 1 Berry is of more than passing interest in as much as the company has actually cored what is believed to constitute a sufficient thickness of oil sand in the bottom of the hole to justify the expectation of developing production. Late Saturday the well had been bailed down to 4,500 feet and the company was considering the advisability of running in a string of tubing in order to wash out the heavily fortified drilling mud remaining in the bottom of the hole. This well shows exceptional promise of resulting in commercial production and officials of the company while maintaining a conservative attitude are nevertheless rather optimistic. The significance which attaches to the status of this well lies in the fact that if commercial production is developed it will automatically prove up the South Belridge Field as being productive with deeper drilling. The extreme depth at which it is being completed will undoubtedly retard aggressive development but additional drilling may be anticipated at an eraly date if commercial production is secured.



Completion of this well will substantially increase the crude oil reserve of the General Petroleum Co. especially in view of the fact that the well may not be located on top of the structure.

The Union Oil Co. and Belridge Oil Co. will benefit to a substantial extent if the General Petroleum Corp. succeeds in finishing what looks like almost a sure shot if the oil sand cored is any criterion of what may be expected.

Improved Fuel Oil Market

The most encouraging factor in connection with conditions on the Pacific Coast, and one which offers considerable promise of further betterment, is the improved status of the fuel oil market. This has become rather pronounced during the past 60 days and will undoubtedly assume a more tangible aspect if the marketing agreement is approved and put into operation. Export shipments of fuel oil from California to foreign ports show a big gain over the amount lifted during the same period last year and present indications confirm the expectation that export shipments will continue at a relatively high rate for the remainder of the year. Fuel oil shipments to the Atlantic and Gulf Coast ports for domestic consumption have been just what the doctor ordered although the price, 55 cents per barrel f.o.b. California ports, is substantially lower than inventory values.

Intercoastal shipments of fuel oil really started in September, 1933, although periodic shipments had been made from time to time earlier in the year. A total of 5,070,303 bbls. of fuel oil was moved to the East Coast for domestic consumption during 1933 but it is significant to note that more than 4,000,000 bbls. of the total was lifted after September 1. Fuel oil shipments to the Atlantic Seaboard for domestic use during the first five months of 1934 are almost 10 times the quantity lifted during the same period last year. Up to the end of May, 1934, California marketers loaded 6,530,737 bbls. of fuel oil for intercoastal movement as compared with 663,669 bbls. at the same time last year.

Production Increase

Crude oil production, reflecting the new allowable set by the petroleum administrator, registered a substantial increase during the current week and will continue at a relatively high rate for the next several months during the summer season. Effective June 1, the state's daily production quota was increased from 462,300 bbls. to 500,300 bbls. and this allotment will prevail during the months of June and July although if conditions warrant the quota for July and August may be revised upward. Consumption during the past several months has been somewhat in excess of expectations and if this favorable condition continues crude oil producers will be in a position to show a profit instead of a deficit.

The allowable daily production of Los Angeles Basin fields has been stepped up from 226,300 bbls. to 253,520 bbls., the coastal fields from 51,000 bbls. to 52,115 bbls. and San Joaquin Basin fields from 185,000 bbls. to 194,665 bbls. Fields showing the largest increase in allowable daily production include Huntington Beach, up 14,620 bbls.; Long Beach, up 6,000 bbls.; Kettleman North Dome, up 2,550 bbls.; East Coalinga, up 2,970 bbls.; Mount Poso, up 800 bbls., and Santa Maria, up 500 bbls. The allowable of West Coalinga was also increased 750 bbls. per day and Kern River 950 bbls. There were a number of other minor increases, although the allowable of North Belridge, Coffee Canyon, Elk Hills, Fruitvale, Kettleman Middle Dome, McKittrick, Midway-Sunset, Wheeler Ridge, Elwood, Rincon, Summerland, Ventura Avenue, Alamitos Heights and Seal Beach remained unchanged.

TANKER SHIPMENTS FROM LOS ANGELES TO DOMESTIC AND FOREIGN PORTS

	May 27—		May 20—			
Intercoastal-domestic—	Total this week	Daily average	Total last week	Daily average	This year to date	Same time last year
Fuel oil	238,573	34,082	465,913	66,988	6,420,087	663,669
Diesel and gas oil	.....	.....	.....	.....	931,159	1,085,064
Gasoline	115,675	16,954	116,792	16,685	2,629,084	3,452,305
Kerosene	.....	.....	49,526	7,075	552,406	417,054
Other finished oil	.....	.....	.....	.....	15,171	42,814
Other unfinished oil	.....	.....	.....	.....	.....	72,584
Foreign exports—						
Crude oil	104,330	14,904	365,630	52,233	3,271,960	3,053,460
Fuel oil	31,309	4,473	471,980	67,426	5,135,252	3,027,982
Diesel and gas oil	.....	.....	.....	.....	1,713,861	1,461,882
Gasoline	.....	.....	82,494	11,785	1,696,108	2,515,725
Kerosene	.....	.....	116,334	16,619	774,399	793,326
Other finished oil	.....	.....	.....	.....	3,529	.....
Other unfinished oil	.....	.....	.....	.....	127,271	34,647
Coastwise-domestic—						
Crude oil	.....	.....	219,177	31,311	4,145,360	4,264,249
Fuel oil	.....	.....	188,503	26,929	4,873,103	4,079,778
Diesel and gas oil	4,925	704	4,310	354,059	847,246	
Gasoline	184,725	26,389	301,296	43,042	4,627,264	4,977,682
Kerosene	.....	.....	10,004	1,429	74,418	90,079
Naphtha distillates	.....	.....	.....	.....	.....	27,651

TANKER SHIPMENTS FROM SAN FRANCISCO TO DOMESTIC AND FOREIGN PORTS

Fuel oil	60,655	8,665	.....	.....	110,650	.....
Diesel and gas oil	.....	.....	.....	.....	448,113	280,531
Gasoline	.....	.....	.....	.....	72,625	500,966
Kerosene	.....	.....	.....	.....	197,498	482,430
Lubricants	.....	.....	.....	.....	18,331	16,400
Foreign exports—						
Crude oil	65,940	9,420	70,750	10,107	803,155	755,497
Fuel oil	27,040	3,863	222,789	31,827	691,431	299,291
Diesel and gas oil	.....	.....	81,943	11,706	662,079	492,179
Gasoline	132,375	18,911	111,301	15,900	1,512,614	1,849,915
Kerosene	.....	.....	45,725	6,532	348,497	431,433
Lubricants	.....	.....	9,815	1,402	72,395	67,145
Other finished oil	.....	.....	.....	.....	2,760	3,745
Other unfinished oil	.....	.....	.....	.....	5,750	19,166
Coastwise-domestic—						
Fuel oil	32,371	4,624	153,976	21,997	1,588,958	1,251,691
Diesel and gas oil	.....	.....	8,342	1,192	95,371	166,162
Gasoline	14,871	2,124	59,807	8,544	1,567,540	1,515,749
Kerosene	.....	.....	3,422	489	43,112	57,531

Mountain View

The Mohawk Petroleum Co. successfully chalked up another new well in the Mountain View Field of Kern County a few days ago when No. 2 Clendennen was brought in flowing 1,780 bbls. of clean 27.5 gravity oil and 1,200,000 feet of gas per day from 5,735 feet. This is the second producing well finished by Mohawk on the Clendennen lease and gives the company six completed wells in the field with another on the Mabry lease scheduled for a test within the next 10 days. The Hogan Petroleum Co., of which Dana Hogan is president, has concluded drilling operations on No. 1 Mid-State and the well will be swabbed in for a test within the next 24 hours. This company, discoverer of the Mountain View Field following failure of the Shell to successfully finish its pioneer wells, is starting two new wells on the Wharton and Porter Day leases which offset the Mott property of the Barnsdall Oil Co. on which the latter recently finished an excellent producer considering its location with respect to structure.

Up in the western end of the Mountain View Field, the General Petroleum has just placed material on ground for No. 1 Brantly and spud is expected to be made within the next two weeks. This location looks rather good and consequently the company should finish an excellent well. The Union's No. 1 Kernco, which recently resumed flowing after having been placed on the pump has been pinched back from 700 bbls. to 370 bbls. per day. The oil from this well, strange as it may seem, tests only 21.5 gravity as compared with 30 gravity oil produced by other wells in the field. This would seem to indicate that the well, which is located about a mile from nearest production, might have found a new structure. This possibility is more or less conjectural and will remain so until some of the intervening territory is drilled up. The oil from No. 1 Kernco is exceptionally clean. The Union is starting a second well on the Kernco lease and is making hole below 4,000 feet in No. 1 Wible which is located very close to the projected fault and should prove to be a good well upon completion. The Standard is experiencing considerable difficulty with No. 1 Nichols and is rigging up cable tools for further work. The company is making good footage in No. 1 Ranton, however, and should have this project ready for a production test within the next 10 days. The Severns Drilling Co. has abandoned No. 1 Smith in Section 24-30-29 as a duster at 6,163 feet.

Montebello

Within another two or three weeks operators should be able to determine the possible importance of the deep zone in the Montebello Field of Los Angeles Basin as the Texas Co. should conclude

IMPORTANT SOUTHERN CALIFORNIA WILDCATS

Company, well, location—	S.T.R.	Depth	Status:
Vanco Dev. Co., No. 1 Artesia, Los Angeles Co.	25- 3-12	mtl.	building rig
Woodward Oil Co., No. 1 Athens, Los Angeles Co.	12- 3-14	rig	rigging up
Clark & Miller, No. 1 Hermosa, Los Angeles Co.	31- 3-14	rig	rigging up
Dominguez Oil Co., No. 1 Dominguez, Los Angeles Co.	34- 3-13	4,770	suspended
Quinn, J. B., No. 1 Domingues, Los Angeles Co.	3- 4-13	4,587	cleaning out
Nudson, T. T., No. 1 Inglewood, Los Angeles Co.	17- 2-14	2,940	plug bottom
Scientia Oil Co., No. 1 Inglewood. Los Angeles Co.	7- 2-14	693	sd. drilling
Standard Oil Co., No. 1 Inglewood Deep, Los Angeles Co.	7- 2-14	2,794	hd. sd. drilling
Pacific Western, No. 1 Inglewood Deep, Los Angeles Co.	8- 2-14	3,132	sd. sh. drilling
Plymouth Oil Co., No. 1 Inglewood, Los Angeles Co.	8- 2-14	3,850	sd. sh. drilling
Wilshire, No. 2 Potrero Deep, Los Angeles Co.	27- 2-14	7,200	sd. sh. drilling
Community Oil Co., No. 1 Montebello, Los Angeles Co.	34- 1-11	7,447	suspended
Universal Consd., No. 1 Montebello Deep, Los Angeles Co.	5- 2-11	7,505	plug 7,060
Universal Consd., No. 2 Montebello Deep, Los Angeles Co.	5- 2-11	6,950	suspended
Universal Consd., No. 3 Montebello Deep, Los Angeles Co.	5- 2-11	7,680	suspended
Texas Co., No. 1 Montebello Deep, Los Angeles Co.	6- 2-11	6,943	O.S. cmtd.
Standard, No. 1 Montebello Deep, Los Angeles Co.	6- 2-11	5,000	sd. sh. drilling
St. Helens, No. 1 Montebello Deep, Los Angeles Co.	6- 2-11	3,597	sd. sh. drilling
Fullerton Oil Co., No. 1 Montebello Deep, Los Angeles Co.	6- 2-11	697	sd. drilling
Frontier Oil Co., No. 1 Pico, Los Angeles Co.	7- 2-11	1,500	cemented
Midfield Oil Co., No. 1 Pico, Los Angeles Co.	19- 2-11	4,817	suspended
Barstow Oil Co., No. 1 Saugus, Los Angeles Co.	35- 5-16	2,136	suspended
Barstow Oil Co., No. 2 Saugus, Los Angeles Co.	35- 5-16	....	material
International Dev. Co., No. 1 Saugus, Los Angeles Co.	34- 5-16	1,300	sd. sh. drilling
B. & L. Drlg. Co., No. 1 Newhall, Los Angeles Co.	14- 3-16	mtl.	build. rig
Black Eagle Oil Co., No. 1 Huntington, Orange Co.	tideland	3,985	redrilling
Nuoil Co., No. 1 Newport, Orange Co.	29- 6-10	6,455	reaming
Explorers Oil Co., No. 1 Fairview, Orange Co.	9- 6-10	904	suspended
Speik Oil Co., No. 1 Fairview, Orange Co.	9- 6-10	1,102	suspended
Placentia Dev. Co., No. 1 Placentia, Orange Co.	31- 3- 9	4,531	redrilling
Mid-Rich Drlg. Co., No. 1 Atwood, Orange Co.	26- 3- 9	728	sd. drilling
Union, No. 1 Coyote, Orange Co.	22- 3-10	1,030	sd. sh. drilling
Bardeen Pet., No. 1 Coyote, Orange Co.	13- 3-10	5,202	plug 5,020
Bridger, J., No. 1 Coyote, Orange Co.	15- 3-10	3,412	sd. sh. drilling
Severns Drlg. Co., No. 2 Coyote, Orange Co.	24- 3-11	7,272	suspended
Great American Pet., No. 1 Chino, San Bernardino Co.	18- 2- 8	2,642	suspended
Great American Pet., No. 2 Chino, San Bernardino Co.	18- 2- 8	3,050	sd. sh. drilling
Tehama Pet., No. 1 Santa Ana Canyon, San Bernardino	32- 2- 8	1,295	prod. test
San Diego Pet. Co., No. 1 Chula Vista, San Diego Co.	32-18- 2	3,085	sd. sh. drilling

the projected production test on No. 4 Barry which is standing cemented with bottom of the hole at 6,943 feet. In the meantime, No. 12 Baldwin should reach the depth at which the deep Cruz zone should be encountered. If this well runs according to form and No. 4 Barry comes in as a commercial producer much of the doubt regarding the importance of the Cruz zone will be removed. The Universal Consolidated is still working with No. 1 Cruze, the deep zone discovery well, in an effort to recomplete it. This well was recently carried down to 7,505 feet in search of a deeper zone but failed to find anything except a water sand and the hole was accordingly plugged back to the original Cruz zone.

The Standard Oil Co. completed No. 20 Temple in the upper zone instead of carrying this well down to the deep Cruz zone and this new well was brought in flowing 284 bbls. of relatively clean 24.8 gravity oil per day. No. 20 Temple, which was finished with casing large enough to permit subsequent deepening to the Cruz zone, was bottomed at 3,703 feet and finished with an 11¾-inch water string landed at 3,478 feet and a 5¾-inch liner carrying 243 feet of perforated. Standard has five other wells under way in this field at the present time. The Fullerton Oil Co. which recently acquired a lease on the McGinley property for a substantial cash bonus and a one-sixth royalty has spudded in one of the two wells scheduled to be drilled down to the lower zone and should have the other making hole within the next few days. St. Helens Petroleum Co. is making splendid progress on No. 6 Piuma & Briano but it will be another 30 days before the bit reaches the depth at which the pay is expected.

Huntington Beach

Standard Oil Co. completed No. 65-B, a new well in the Huntington Beach Field, and completed preparations to begin drilling operations on three additional wells. The Standard's new producer was brought in on a compressor doing 655 bbls. of 24.5 gravity oil per day from 4,400 feet after the hole had been plugged back from 4,505 feet and finished with a 6⅝-inch liner including 833 feet of perforated. The Come Oil Co. is rigging up rotary drilling equipment in No. 1 Newland-Borchard in the extreme eastern section of the Huntington Beach Field and spud should be made some time within the next few days. This projected deep test is located in an area that looks unusually promising but which so far has failed to come up to expectations despite the fact that several fairly deep tests have been drilled during the past several years.

Judge L. N. Turrentine of the Superior Court at Santa Ana has issued a writ of injunction, effective June 9, which restrains the operators of 27 wells in the Huntington town lot section of the Huntington Beach Field from continuing production activities until certain stipulations have been complied with. Judge Turrentine, who has been hearing the case of the State of California against four operators charged with whipstocking wells out beneath state tidelands, stated in the writ that the companies in question were prohibited from further operation until they agreed with the Orange County clerk to impound all proceeds received from the sale of oil and gas until the litigation is terminated. The operators involved include the H. E. Allen Trust with 24 wells, and A. L. Jameson, Venton Oil Co., and Minnesota Oil Co. with one well each.

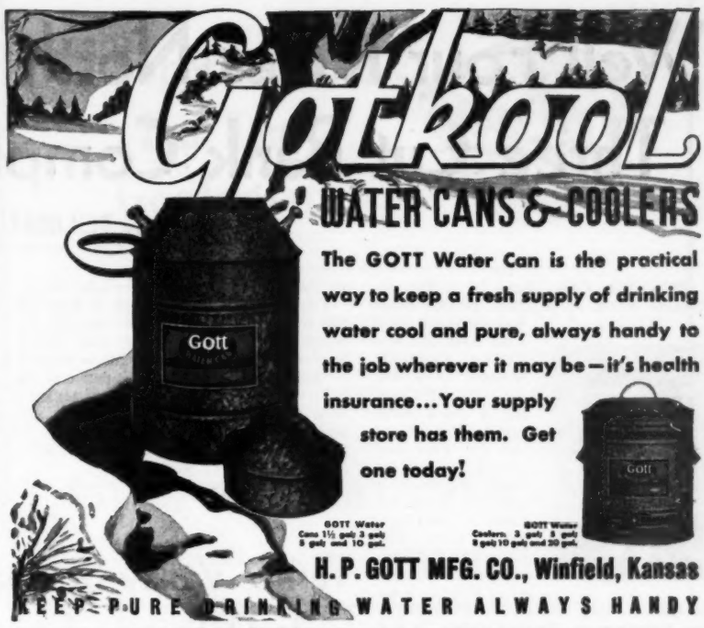
Dominguez

A check of development work under way in the Dominguez Field of Los Angeles Basin indicates the probable completion of several additional new wells during the course of the next 15 days. Union Oil Co. has completed No. 28

(Continued on Page 87)

IMPORTANT NORTHERN CALIFORNIA WILDCATS

Company, well, location—	S.T.R.	Depth	Status:
General Pet., No. 9 Capitan, Santa Barbara Co.	32- 5-30	1,296	sd. sh. drilling
Shell Oil Co., No. 3 Capitan, Santa Barbara Co.	32- 5-30	mtl.	building rig
Fields, O. C., No. 1 Casmalia, Santa Barbara Co.	13- 9-35	mtl.	building rig
Fairview Oil Co., No. 1 Purisima, Santa Barbara Co.	18- 7-34	2,430	cleaning out
Barnsdall-Rio Grande, No. 8 Doty Elwood, Santa Barbara	15- 4-29	4,868	redrilling
Signal O. & G. Co., No. 2 Elwood, Santa Barbara Co.	tideland	5,415	flow, mud, wtr.
East Elwood Pet. Co., No. 1 Elwood, Santa Barbara Co.	14- 4-29	3,399	fish D/P
Hastain & Stone, No. 1 Goleta, Santa Barbara Co.	9- 4-28	2,701	suspended
Union, No. 2 Santa Maria, Santa Barbara Co.	24-10-34	rig	rigged up
Richfield, No. 1 Rincon, Ventura Co.	17- 3-24	2,557	cemented
Woodrow Pet., No. 1 Rincon, Ventura Co.	4- 3-24	7,612	suspended
Continental, No. 3 San Miguelito, Ventura Co.	23- 3-24	2,876	hd. sd. drilling
Hancock Oil Co., No. 1 Fillmore, Ventura Co.	13- 4-19	3,357	suspended
Oil Ridge Oil Co., No. 1 Fillmore, Ventura Co.	1- 4-19	972	gr. sd. drilling
Piru Oil Co., No. 1 Piru, Ventura Co.	14- 4-18	rig	rigging up
Williamson & Donaher, No. 1 Simi, Ventura Co.	36- 3-18	997	sd. sh. drilling
American Drlg. Co., No. 1 Simi, Ventura Co.	6- 2-17	263	sd. sh. drilling
Prop. Service Corp., No. 1 Lloyd, Ventura Co.	24- 3-23	1,030	sd. sh. drilling
Laing & Jacobs, No. 1 Shiells, Ventura Co.	32- 4-19	701	suspended
Kirk, W. A., No. 1 Sulphur Mountain, Ventura Co.	21- 4-22	1,954	rebuild. rig
Mosher, J. W., No. 1 Santa Paula, Ventura Co.	22- 4-21	2,041	sd. sh. drilling
Las Posas Pet., No. 1 Las Posas, Ventura Co.	22- 3-20	6,570	sd. sh. drilling
International Oil Developers, No. 1 Conejo, Ventura Co.	33- 2-20	3,068	suspended
Shell Oil Co., No. 1 Gould Hills, Kern Co.	21-29-21	4,661	sd. sh. drilling
Standard Oil Co., No. 1 McKittrick, Kern Co.	15-30-22	2,850	bl. sh. drilling
Casa Mira Oil Co., No. 1 Belridge, Kern Co.	29-28-20	4,982	drill out cmt.
General Pet., No. 1 South Belridge, Kern Co.	30-28-21	11,377	prod. test
Union Oil Co., No. 18 North Belridge, Kern Co.	36-27-20	7,700	br. sh. drilling
Standard, No. 1 North Belridge, Kern Co.	36-27-20	4,528	rigging up
Associated, No. 1 Lost Hills, Kern Co.	2-26-20	7,858	suspended
Inland Pacific, No. 1 Semi-Tropic, Kern Co.	29-25-21	1,118	suspended
Howells Bros., No. 1 Round Mountain, Kern Co.	32-28-29	2,380	abandoned
Ohio Oil Co., No. 1 Buena Vista Lake, Kern Co.	31-31-26	7,957	fishing D/P
Caravel Pet., No. 1 Edison, Kern Co.	19-30-30	1,700	sd. sh. drilling
Alta Oil Co., No. 1 Union Avenue, Kern Co.	6-30-28	6,457	plug 4,040
Mountain View Dev. Co., No. 1 Mountain View, Kern Co.	12-30-28	1,250	cleaning out
Gilmore-Snyder Oil Co., No. 1 Mountain View, Kern Co.	24-30-28	4,080	sd. sh. drilling
Severns Drilling Co., No. 1 Mountain View, Kern Co.	24-30-28	6,163	abandoned
Union Oil Co., No. 2 Mountain View, Kern Co.	23-30-28	2,660	sd. sh. drilling
Union Oil Co., No. 3 Mountain View, Kern Co.	15-30-28	....	grading
Hogan Pet., No. 4 Mountain View, Kern Co.	29-30-29	5,845	prod. test
Standard, No. 1 Mountain View, Kern Co.	19-30-29	5,843	rig cable tools
Hoyt, Otis, No. 1 Mountain View, Kern Co.	19-30-29	mtl.	building rig
Monterey Exploration, No. 2 Edison, Kern Co.	22-30-29	mtl.	building rig
Jergins Trust, No. 1 Edison, Kern Co.	22-30-29	mtl.	building rig
Commanche Oil Co., No. 1 Commanche, Kern Co.	15-32-29	3,365	suspended
Tejon Ridge Oil Co., No. 1 Commanche, Kern Co.	23-32-29	rig	rigging up
Badger Oil Co., No. 1 Wheeler Ridge, Kern Co.	31-11-19	6,000	cleaning out
Russ Oil Synd., No. 1 Kingsburg, Fresno Co.	28-12-11	4,004	suspended
Bergman, Harry, No. 1 Kingsburg, Fresno Co.	12-12-11	6,030	sd. sh. drilling
Western Gulf, No. 1 S.P., Fresno Co.	15-17-15	8,800	sd. sh. drilling
Union, No. 1 Lillis-Kettleman, Fresno Co.	24-21-16	10,944	redrill 9,970
Texas Co., No. 1 Alcalde, Fresno Co.	1-21-14	....	location
Farrell Pet., well No. 1, San Luis Obispo Co.	18-31-12	1,090	sd. sh. drilling
Willett Oil Co., No. 2 Cholame, San Luis Obispo Co.	10-25-15	316	sd. sh. drilling
Commonwealth Consd. Gas Co., No. 1 Tulare Lake, Kings	21-22-20	1,580	redrilling
Armadillo Oil Co., No. 1 Tulare Lake, Kings Co.	32-22-20	1,760	sd. sh. drilling
Tulare Basin Oil Co., No. 1 Tulare Lake, Kings Co.	2-22-19	1,192	recemented
Tulare Basin Oil Co., No. 2 Tulare Lake, Kings Co.	2-23-19	1,200	suspended
Kettleman Pac. Oil Co., No. 1 Tulare Lake, Kings Co.	11-23-16	563	sd. sh. drilling
Weller, Carl, No. 1 Tulare Lake, Kings Co.	11-23-16	868	sd. sh. drilling
Douglas, J. M., well No. 1, Monterey Co.	36-22- 9	3,641	br. sh. drilling
Oakdale Oil Co., No. 1 Oakdale, Stanislaus Co.	5- 2-10	4,760	suspended
Pacific Northern Oil Co., No. 1 Guinda, Yolo Co.	23-12- 3	6,760	suspended
Buttes Oilfields Co., No. 1 Marysville, Sutter Co.	35-16- 1	2,731	gas—shut in
Buttes Oilfields Co., No. 2 Marysville, Sutter Co.	35-16- 1	4,350	andesite—drlg
Milham Exploration Co., No. 1 Tracy, San Joaquin Co.	5- 4- 5	4,808	hd. sh. drilling
Tehama Pet., No. 1 Murdock, Glenn Co.	10-22- 5	620	suspended
Pure Oil Co., No. 1 Chowchilla, Madera Co.	7-10-14	2,821	sd. sh. drilling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Well Four Miles North of Jal Tests 1,000 Bbls.; Three Cut Bank Completions, Five Locations

By TOLBERT R. INGRAM
Staff Correspondent, Rocky Mountain Area

DENVER, Colo., June 11.—The allowable outlet of the New Mexico pools was increased June 1 to meet the new state allocation. General Crude Oil Co.'s No. 1 Cushing, 4 miles north of production in the Jal Pool and one of two isolated wells, looks as if it will be good for 1,000 to 1,500 bbls. daily. Three new locations were made in the Eunice district. Van Welch, Jr. and others' No. 2 State, in the Artesia area, flowed 70 bbls. a day through casing after a shot. One well was abandoned and two new locations released in the Artesia area. One new location in the Maljamar area and resumption of operations northwest of the Getty Pool were announced.

There were no completions or new locations in Colorado. W. R. Ramsey is resuming work on his two wells in the northeastern part of the state.

One new location in Lincoln County and one completion in the Osage Field were reported in Wyoming.

There were three completions and five new locations in the Cut Bank Field in Montana. Producers Development Syndicate's test 3 miles southeast of production was a dry hole. Montana Power Gas Co.'s No. 1 People's Unit, 3 miles from the nearest producer in Cut Bank, looks like a gas well.

NEW MEXICO

The allocation of 48,000 bbls. of crude a day for New Mexico, which went into effect Jun 1, has resulted in an increase of the allowable output of the various pools. Hobbs was increased from 35,542 bbls. daily for May to 36,750 bbls. daily for the first half of June. Eunice was increased from 2,100 bbls. to 2,400 bbls., and the Jal Pool was increased from 2,800 to 3,340 bbls.

Hobbs potential as of June 1 was 1,851,820 bbls. daily, an increase of 10,567 bbls., compared with May 16. There are 186 units of 40 acres each in production. The Eunice Pool has 13 units of 40 acres in production for the first half of June and the top allowable is 198 bbls. daily for each well. Jal has 25 units on production and the top allowable is 286 bbls. a well.

Jal Area

General Crude Oil Co.'s No. 1 Cushing, SW SE NW Section 23-24-36, one of two isolated wells 4 miles north of the most northerly producer in the Jal Pool, was given a drill stem test at 3,498 feet, total depth, and indicated it was good for 1,000 to 1,500 bbls. daily, with 4,000,000 to 7,000,000 feet of gas. The hole is being reamed to 3,465 feet to run pipe and prepare for completion. The pay was tested at 3,465-98 feet. This is an old gas well drilled deeper from 3,205 feet. It is a little less than half a mile east of the company's No. 1 Meyers, NE cor. SE Section 22, which was deepened recently from the gas horizon and recompleted for better than 5,000 bbls. of oil a day.

Barnsdall Oil Corp.'s No. 1 Forrest, NE NW SW Section 24-25-36, which was treated with acid twice and shot in efforts to make a commercial well out of it, has been completed and is pumping 40 bbls. a day at 3,325 feet, total depth.

Texas Co.'s No. 2 Moberly, C NW SE Section 8-26-37, which had considerable trouble with bottom water, has finally been treated and completed and is making 90 bbls. daily, of which 8 per cent is basic sediment and water. It was plugged back from 3,360 feet to 3,310 feet. It topped the anhydrite at 985 feet, salt at 1,120 feet and brown lime at 2,780 feet. Elevation is 2,977 feet.

Repollo Oil Co.'s No. 1 Stephens, SW cor. NE Section 13-25-36, is coring in lime at 3,165 feet, and Continental Oil Co.'s No. 13-A-1 Sholes, C SW SE Section 13-25-36, is drilling at 1,740 feet after setting 9⅝-inch at 1,304 feet.

Eunice Area

Three new locations in the Eunice area this week brought the total number of active operations to 9. One problem here has been to obtain sufficient water for the rotaries. A 6-inch water line is being laid from Monument to the field and it is expected this difficulty will be solved. It starts in Section 9-21-37 and ends in Section 17-21-36.

Shell Petroleum Corp.'s No. 1 State, C NE SE Section 31-21-35, is a location west of the present development and will prove more than a mile of territory in that direction. Two other locations are Continental Oil Co.'s No. 20-C-1 State, C NW NW Section 20-21-36, and its No. 20-C-1 State, C SW NW same section. Atlantic Oil Producing Co.'s No. 2-B State, C NE SE Section 8-21-36, delayed at 45 feet for several weeks due to water shortage after drilling several wells for water, has resumed and is drilling at 1,231 feet in the red beds. The Continental Oil Co.'s No. 17-A-3 A. E. Meyers, C SW NW Section 17-21-36, is drilling at 1,003 feet in red rock, and Gypsy Oil Co.'s No. 1 Bell-State, C SW SE Section 8-21-36, is drilling plug at 2,831 feet. Repollo Oil Co.'s No. 1 State, NE NW NE Section 19-21-36, has derrick completed. Tide Water Oil Co.'s No. 2 Coleman, C NW NE Section 17-21-36, is waiting after cementing 7-inch at 3,796 feet with 75 sacks.

Hobbs Area

Gypsy Oil Co.'s No. 8 West Grimes, NW SW NW Section 32-18-38, is bottomed in lime at 3,715 feet and trying to kill a gas blowout at 3,703-10 feet. The gas was estimated at 60,000,000 to 70,000,000 feet a day. Continental Oil Co.'s No. 1 Grimes, SW cor. SE Section 28-18-38, is building derrick, and Repollo Oil Co.'s No. 3 Grimes, SW NW NW Section 28-18-38, is rigging up rotary. Skelly Oil Co.'s No. 2 Turner, C NE NW Section 34-18-38, on the southeastern flank, is fishing for drill stem at 3,145 feet in lime. Noble Brothers' No. 2 Shell-State, E NE SW Section 24-18-37, is waiting after cementing 9⅝-inch at 2,823 feet with 200 sacks. Shell Oil Corp.'s No. 3 Berry, NE cor. Section 31-18-38, spudded May 27 and is waiting after cementing 12½-inch at 233 feet with 130 sacks. Shell's No. 2-B State, NE cor. NW Section 33-18-38, had a show of gas at 3,670-76 feet and is drilling at 3,868 feet in lime.

Lea Area

Texas Co.'s No. 1 Lea, SW cor. NW Section 14-20-34, 3 miles north of Lea Pool, is drilling at 3,585 feet in lime. The bottom of the brown sand and the pay was at 3,579 feet. It is swabbing and flowing 120 bbls. a day while drilling deeper. Same company's No. 2-B Lynch, C SE SW Section 27-20-34, is fishing at 3,750 feet. Rods were being pulled to shoot.

Eddy County

Van Welch, Jr. and others' No. 2 State, SW NW NW Section 22-17-28, estimated at 65 to 70 bbls. on the pump from the pay at 1,932-45 feet, was completed as a flowing well after being shot with 60 quarts. It is making 70 bbls. a day through the casing.

Flynn, Welch & Yates' No. 69 State, NW SE SE Section 10-19-28, Artesia area, was abandoned at 2,180 feet, total depth. It was treated with acid at 1,980 feet, but made only 1 bailer of oil in 11 hours.

Welch & Compton's No. 1-A Smith, NE cor. SW Section 8-18-27, an operation not heretofore reported, is rigging up. Another new location is Tignor, Etz & Keyes' No. 1-A Keyes, C SE SW Section 10-17-28, which is moving in materials.

Turner Valley Southeast Extension Well Is Definitely Commercial Producer

By VICTOR LAURISTON
Staff Correspondent, Canadian Fields

CHATHAM, Ontario, June 9.—In the new southeastern extension of the South Turner Valley Field, Highwood-Sarcee Oils' No. 1, LSD 16, Section 21-18-2w5, is definitely a commercial producer from the upper horizons of the Madison lime. The wet gas flow has increased to around 17,000,000 feet, below 5,574 feet, or 222 feet in the lime. At this depth the main porous horizon, expected between 350 and 400 feet in the lime, had not yet been reached. The naphtha content of the wet gas is reported unusually heavy and potential recovery from the present flow is estimated between 150 and 200 bbls. a day which should be materially increased when the main porous horizon is tapped. In most of the South Turner Valley wells the gas from the upper lime has been much drier, and the large naphtha recovery has been from the heavily saturated gas of the main porous horizon in the black lime. Drilling is continuing with back pressure around 500 pounds. The well also has a commercial production of light crude from the Dalhousie sand. The strike extends the proven naphtha area about a half mile southeast. Standard tools are being used to complete the well.

In Section 28-18-2w5, Mar Jon Oil Co.'s No. 2 Kindersley, LSD 10, has been gradually increasing its crude naphtha recovery from the lime at 5,870 feet. Production has been built up to about 45 to 50 bbls. a day, approximately double the initial recovery.

Publix Oil & Gas Co.'s No. 1, LSD 8, is at 3,640 feet and running 10-inch to 3,600 feet to overcome caving caused by crude oil seepage. A small show of crude was struck at 3,520 feet. When the job is done the outfit will drill and underream to the Dalhousie sand where there is a chance of crude oil at about 4,200 feet. Century Royalties' No. 1, LSD 14, Section 28-18-2w5, is drilling below 5,000 feet with rotary outfit. The test has made this depth in 108 days, which is claimed to be a new drilling record for Turner Valley. Hilary Head is drilling superintendent. The test, toward the west side of the section, is checking considerably deeper than Sterling Royalties' No. 1 producer, only a quarter mile east.

On the east flank of the South Turner Valley structure, Northwest Co.'s No. 1 Calgary & Edmonton-Longview, LSD 5, Section 27-18-2w5, is drilling rotary test below 6,120 feet. At this depth the hole is 530 feet in the lime. Some gas is unofficially reported, but no production test has been made.

In the Central Turner Valley, Okalta Oils' No. 4, LSD 8, Section 1-20-3w5, is shut down at 4,000 feet after failing to secure commercial production in the upper light crude horizons. Drilling to this depth was called for under an agreement with the Indiana-Alberta Oil Co. New McDougall-Segur Oil Co.'s No. 7, Section 12-20-3w5, is reported spudding in for a test of the upper light crude horizons.

Rig irons and timbers are being hauled to location for Phillips Petroleum's No. 1, LSD 16, Section 16-20-3w5, secured some time ago by "Red" Phillips. The area is west of the North Turner Valley Field, in the first fault block, and location is south and west of Model Oils' No. 1, which has been a large and consistent producer of light crude from the Madison lime. Phillips' No. 1 will likely spud in next month.

Official figures for Alberta fields and wells in April show a total Turner Valley production of 104,856 bbls. Royalite Oil Co. produced 40,675 bbls., including output of the absorption plant which handles residual gas from other companies as well.

Tests in the Foothills

On the Pekisko Hills structure, south of Turner Valley, Pekisko Hills Co.'s No. 1, LSD 6, Section 6-17-2w5, has resumed drilling after cementing casing in the top of the limestone at 870 feet.

Duvernay Test Abandoned

On the Duvernay structure north of Edmonton, Frontier Development Co.'s No. 1 Brosseau, LSD 8, Section 36-55-12w4, has been abandoned.

Steveville Area

Alberta lands and mines officials at Calgary are receiving bids up to June 15 on extensive blocks of acreage in the Steveville area. The acreage open is in Township 21, Ranges 11 and 12; Township 22, Ranges 12, 13 and 14, and Township 23, Ranges 12 and 14, west of the fourth.

Border Fields

On the Twin River structure south of Lethbridge, Nordon-Roney's No. 2 Twin

(Continued on Page 87)

Flynn, Welch & Yates' No. 68 State, NW SW NW Section 27-18-28, for which location was staked last fall, began spudding May 14 and is drilling at 1,200 feet in anhydrite. The 10-inch is at 312 feet and 8¼-inch at 707 feet. R. D. Compton's No. 6 Brainard, SE cor. Section 5-18-27, mudded 6⅝-inch at 1,324 feet and is drilling at 1,385 feet in lime.

A new location in the Maljamar area is Skelly Oil Co.'s No. 1 Skelly and others, NW Section 23-17-31.

Four miles northwest of the Getty Pool, operations have been resumed on Getty Oil Co.'s No. 2 Cook & Ironsides, C SW NW Section 8-20-29. This well was drilled to 390 feet in 1929 and temporarily abandoned. Getty Oil Co. has a large block of acreage between this well and the nearest producers in the Getty Pool.

San Juan County

Continental Oil Co.'s No. 35, SE NE SE Section 2-29-19, Rattlesnake Dome, is spudding at 135 feet in shale.

Torrance County

Witt Oil & Gas Co.'s No. 2 De Hart (No. 1 Roland), NW SE SW Section 12-7n-7e, Wilcox district, was dry and abandoned at 1,300 feet. It was south of No. 2 Kutchin, completed some time ago for 150,000 feet a day of carbon dioxide gas. The company is drilling No. 3, NE SW Section 12-7n-7e, which had a show of carbon dioxide gas at 220 feet and is fishing at 300 feet.

Santa Fe County

Elmer Fisher's No. 1 Hill, Section 6-10n-7e, Barton district, is drilling below 1,800 feet without any change in formation. C. C. Owen and others' No. 1 Cantwell, NW cor. Section 5-10-9e, ran the 10-inch to 425 feet and is drilling at 500 feet.

COLORADO

Moffat County

Texas Co.'s No. 1 Van Schaick, SW cor. Section 19-12-100, Hiawatha Dome, which was drilled to 191 feet last fall and shut down, is preparing to resume. A cable tool contract has been let to Manning & Terry. The well is an offset on the north to No. 1 Wheeler, a gas well.

Mountain Fuel Supply Co.'s No. 4-B Wilson, C NE NW Section 23-12-100, is rigging up.

Routt County

Texas Co. is building road to location for its No. 1 Sampson, SE NE SE Section 2-1s-85, a wildcat on the King Mountain structure in the Egeria Park district. Contract has been let to Manning & Terry and it will be drilled with cable tools. This will be an important test as it starts in the Pennsylvanian (below the producing horizons at Iles, Moffat and Tow Creek) and will explore lower formations which have never been tested in Routt County. One test of the Pennsylvanian and deeper horizons was drilled in Moffat County by William A. Meyers, on Skull Creek, and California Co. tested the Pennsylvanian on the Rangely Dome in Rio Blanco County and brought in a small oil well.

Texas Co.'s No. 5 Carstarphen, NW NE NW Section 5-6n-86, Tow Creek, is trying to run the 13-inch at 500 feet, total depth.

Grand County

Colorado Oil Refining Co.'s No. 1 Linke, NE SW SW Section 13-1n-77, Granby district, set the 12½-inch at 100 feet and is drilling below that depth.

Jackson County

Continental Oil Co.'s No. 3 Government (Hoye permit) NW cor. NE Section 34-9n-78, South McCallum, is digging pits. It will be drilled with rotary and the plan is to go through the sand at 4,800 feet which makes carbon dioxide gas and test the lower horizons. The freezing up of the wells heretofore drilled has been due to the expansion of this gas when it comes into the hole and in this operation is planned to hold down the pressure with heavy mud.

Colorado Oil Refining Co.'s No. 1 North Park Coal Co., NW NW Section 18-9n-78, North McCallum, is standing at 1,520 feet waiting for casing. The plan of going only to 1,500 feet has been changed and it will drill deeper.

Park County

South Park Oil & Gas Co.'s No. 1 Esche, SE cor. NW Section 5-9s-76, Como district, is reported redrilled to 2,412 feet. South Park Oil Co.'s No. 1 State, SE cor. SW Section 16-11s-75, Hartsel district, has road completed and will move rig from old Mutual well in Fremont County. The revised surface elevation of this well is 9,386 feet, the highest in the Rocky Mountain area.

Fremont County

John Milner and others' No. 1, SW SE SE Section 30-18-69, Florence district, is drilling at 3,100 feet.

Huerfano County

S. W. Pressey's No. 1 Ojo, SW NE Section 10-29-69, Oak View district, is standing temporarily at 2,700 feet, but will resume shortly to go to the Dakota. His No. 2 Ojo, NE NE SE Section 4-29-69, is spudding at 60 feet. This is a corrected location which has been confused with the old Midland Petroleum Co.'s No. 1 Campbell, immediately south, which has been standing for some time at 500 feet.

Archuleta County

Oil City Petroleum Co.'s No. 1 Garnett, Lot 3, SW Section 25-33-2e, Price district, lost the hole at 130 feet when the tools were buried under a cave. Rig is being skidded 10 feet.

Prowers County

Trojan Oil & Gas Co.'s No. 1 Lotus Oil, NW NE NE Section 15-23-46, Lamar district, is drilling at 3,013 feet.

Weld County

W. R. Ramsey is reported repairing water line and preparing to resume operations on the two wells he drilled in the Buckingham district. His No. 1 St. Anthony, SW NE SE Section 15-7n-59, completed as a 6,000,000-foot gas well in the Muddy sand at 6,680-6,711 feet in January, 1933, will be deepened to the Lakota. This well found oil in the top of the Dakota, followed by water, and was plugged back. Only 8 sacks of cement was used in making the shutoff. When gas from this well was being used last year to drill his No. 1 Scriven, C NW Section 22-7-59, it was allowed to blow two or three times a day to clean out the accumulated fluid. Reports differ as to what actually happened. One is that the plug broke and Dakota water came in, and the other is that the well is standing with 1,500 feet of oil in the hole. No. 1 Scriven was drilled to 6,818 feet and found the Muddy dry. It was left in condition to deepen to the Lakota and possibly lower horizons.

WYOMING

Albany County

Ohio Oil Co.'s No. 1 Chappell, C SE NW Section 28-21-76, East Rock River, is drilling at 2,160 feet after going through the Dakota series without finding anything worth while. The next objective is the Sundance.

Carbon County

Earl W. Reeder, Inc.'s No. 1 Union Pacific, C SW SW Section 19-20-83, Overland Dome, has underreamed 4¾-inch to bottom at 4,690 feet. New oil showing in the hole is believed to be coming from the bottom. The formations are running so irregular that no definite opinions are given. After going through what was believed to be the Muddy, the drill again encountered formations which appeared to be Mowry shale. Then at 4,590 feet more oil came in and samples indicated that it was the Muddy.

Sinclair-Wyoming Oil Co.'s No. 4 Wertz, SW cor. SE Section 7-26-89 (formerly Producers & Refiners Corp.), is redrilling at 3,000 feet. M. K. Quealy's No. 1 Albert, SE SW Section 17-25-79,

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Shirley district, a location for some time, is moving in machine. It will test formations down to the Pennsylvanian, expected at 2,500 feet. Ohio Oil Co.'s No. 1 Morris, C NW SE Section 6-20-77, Diamond Dome, is spudding. The Shannon is expected at 2,000 feet.

Fremont County

Kinney-Coastal Oil Co.'s No. 1 Chatterton-Weeks, C SW NE Section 22-3n-1w, Pilot Butte, is running 6¼-inch at 3,990 feet, total depth. Monongahela Oil Co.'s No. 1 Wisda, NE SE SE Section 13-28-93, Crook's Gap district, set the 10-inch at 125 feet. This will be a test to the Dakotas.

Lincoln County

H. M. Eller and others' No. 1, SE cor. SW Section 32-19-116, Cumberland district, is drilling at 500 feet. He has released a location for his No. 2 Government, NE cor. SW Section 32-19-116.

Sweetwater County

Cole and others' No. 1, Section 10-25-97, Pickett Lake district, has materials on the ground.

Washakie County

Nagle and others' No. 1, C SW SW (Lot 4) Section 31-48-90, Hidden Dome, is rigging up. This operation is also known as the Christ Oil Syndicate.

Hot Springs County

California Exploration Co.'s No. 1, NE SE NE Section 12-44-97, Waugh Dome, is drilling at 1,000 feet.

Big Horn County

W. O. Taylor and others' No. 1 Hoskins, SE SE Section 25-56-97, Byron district, has resumed operations at 2,855 feet under contract with Sidney H. Keoughan, who moved in rotary to carry hole to the Madison lime. The 10-inch was pulled to drill in a 11-inch hole.

Park County

Paul Stock's No. 1 Government, SE cor. NE Section 20-51-100, Oregon Basin, is spudding. Henderson Producing Co.'s No. 3H9 Government, NW SE NE Section 31-58-99, old well drilling deeper, failed to get a shutoff at 1,765 feet and is recementing.

Sheridan County

Sheridan Syndicate's No. 1 Allison, SW SE Section 15-55-85, Beaver Creek, has rebuilt derrick destroyed by fire and is rigging up to resume at 1,300 feet.

Converse County

E. B. Jones and others' No. 1 State, SW cor. Section 16-32-69, Shawnee district, has derrick completed. Other wells in this district show no change.

Crook County

Dr. B. R. Kinter and others' No. 1 Rockford-Wyoming, NE SE Section 13-52-62, Rocky Ford district, is drilling at 800 feet.

Weston County

One completion in the Osage Field was reported in Chadron-Osage Oil Co.'s No. 25, CNL SW SE Section 14-46-64, which pumped 20 bbls. initial from sand at 1,730-40 feet after a shot. Same firm's No. 4, CNL SW SW Section 13-46-64, is drilling at 300 feet. C. L. Nichols' No. 5, SE NW Section 8-46-63, is drilling at 130 feet, and Homestake-Osage Oil Co.'s No. 4, NW SE Section 13-46-64, is drilling at 900 feet. Carl Cundy's No. 8, SE NW NE Section 31-46-63, is drilling at 200 feet.

MONTANA

Glacier County

Three completions, five new locations and one near completion of a semiwildcat were reported in the Cut Bank Field. Several of the new locations are isolated wells which will test territory between producers located at wide intervals. The most important completion was Producers Development Syndicate's No. 1 Eniarson, SW NW NW Section 29-32-4w, which appears to establish the limits of the pool far to the southeast. It is 3½ miles southeast of Texas Co.'s No. 1 State, Section 16-32-5w, the farthest to the southeast of any producer so far completed. It is reported to have gone to the top of the Ellis, but depth is not stated. The first sand, which was dry, was reported topped at 2,631 feet. Last depth reported was 2,679 feet.

Texas Co.'s No. 3 Hinkle, SW cor. NE Section 2-34-6w, had 1,600 feet of oil in the hole from the Cut Bank sand at 2,818-51 feet and was completed at 2,865 feet, but has not been tested.

Montana Power Gas Co.'s No. 3 Seeba, SE cor. NW Section 2-34-6w, swabbed 86 bbls. first 24 hours from the pay at 2,832-69 feet. Total depth is 2,875 feet. Oil rose 900 feet in the hole and the 8¼-inch was set at 2,819 feet.

Montana Power Gas Co. has made a location for its No. 1 Hawkins, C SW Section 17-33-5w, a mile northwest of its No. 1 Neill, which recently came in as a producer and proved the Cut Bank and South Cut Bank areas to be one continuous field. Same company's No. 1 Whetstone, C SE NE Section 7-33-5w, also is an isolated well on the east edge of the town of Cut Bank and 1¼ miles southwest of its No. 1 Simero. Another location is Consolidated Gas Co.'s No. 2 Ewing, C Lot 4 (SE SE) Section 34-35-6w. Santa Rita Oil & Gas Co.'s No. 2 Hardy, Lot 4 (SW NE) Section 27-35-6w, is rigging up. It is an outside well on the northwestern side of the field, but in line with No. 1 Hardy, a producer. Santa Rita Oil & Gas Co.'s No. 3 Whetstone, C Lot 1 (C NE NE) Section 27-53-6w, has rig up.

The important near completion is the Montana Power Gas Co.'s No. 1 People's Unit, 880 feet east of C Section 14-33-5w, 4 miles to the southeast of the town of Cut Bank and 3 miles northeast of its No. 1 Neill. It is drilling at 2,690 feet and had a good show of gas and oil at 2,686 feet. The 6¼-inch has been cemented on bottom. The show was mostly gas and it looks as if it will be a gas well.

Alberta-Pacific Consolidated Oil Co.'s No. 4 Matson, W SW NW Section 14-34-6w, is rigging up, and P. B. Anderson and others' No. 1 Anderson, SW cor. NW Section 26-35-6w, is drilling at 1,820 feet. Annand & Hutchings' No. 1 Bonnett, NW cor. SE Section 10-32-5w, topped the Colorado at 575 feet and is drilling at 925 feet, and Lon Crumley's No. 2 Weaver, Lot 8, Section 27-35-6w, is drilling at 2,000 feet. Dakota-Montana Oil Co.'s No. 3 Gilham, NE SE Section 3-34-6w, is drilling at 2,275 feet. W. M. Fulton and others' No. 2 Haggerty, C NW NW Section 15-34-6w, which has been standing rigged since last November, is spudding. Hannah-Porter Co.'s No. 1 Zabel, C SE NE Section 30-32-4w, is an abandoned location.

Indian Oil Co.'s No. 1 Clark, C SE SE Section 4-34-6w, topped the Colorado at 623 feet and cemented the 10-inch at 640 feet. Montana Headlight Oil Co.'s No. 2 Yunck, C NW SW Section 1-34-6w, topped the Colorado at 400 feet, and cemented the 10-inch at 445 feet.

Montana Power Gas Co.'s No. 1 Fuller, 220 feet north of C Section 17-33-5w, is building rig, and Nadeau Brothers' No. 3 Van de Mar, W SW NW Section 35-35-6w, is drilling at 530 feet. Olive Oil Co.'s No. 1 Matson, W NW NW Section 14-34-6w, is building rig, and Par Oil Co.'s No. 3 Haines, SW cor. Section 2-34-6w, is drilling at 1,850 feet.

R. C. Tarrant's No. 1 Getty, C NE SE Section 2-34-6w, is drilling at 2,727 feet, and his No. 1 Jones, C SW SE Section 31-34-5w, is spudding at 255 feet. Tarrant's No. 2 Riekhoff, SW NW SE Section 3-34-6w, is building rig.

Texas Co.'s No. 2 Antrim, E NE NE Section 34-35-6w, recently reported a completion, pumped 50 bbls. initial, and its No. 3 Antrim, E SE SE Section 34-35-6w, is running casing at 315 feet. Same company's No. 1 Consolidated Gas lease, 105 feet west of C Section 15-35-5w, is drilling at 140 feet, and its No. 2 fee, Lot 8, Section 15-35-6w, is drilling at 2,690 feet. Texas Co.'s No. 3 fee, 660 feet south of C Section 15-35-6w, is drilling at 1,500 feet, and its No. 1 Kearns, W NW NW Section 23-35-6w, is digging sump. Its No. 1 Mabel Morrison, NE SW SE Section 22-35-6w, is drilling at 2,753 feet, and its No. 3 Purdy, W NW SW Section 35-35-6w, is drilling at 1,855 feet. Texas Co.'s No. 1 Schlag, C SW SW Section 26-35-6w, is drilling at 2,873 feet.

Toole County

Bruce P. Radigan and others' No. 1 McDonough, NW cor. Section 17-33-2e, Devon district, had a show of oil and gas at 1,157 feet and cemented the 8¼-inch at that depth on top of the objective. Eagle Petroleum Co.'s No. 4 Haugen, SW NW Section 12-35-3w, Kevin-Sunburst Field, is spudding.

Carbon County

Ohio Oil Co.'s No. 14 Maddox, C NW NW Section 10-7s-21, Dry Creek, is drilling at 1,100 feet in shale.

Liberty County

J. H. Hamilton and others' No. 1 Northern Farms, C NE SW Section 10-37-5e, Flat Coulee, is drilling at 478 feet.

Pondera County

California Co.'s No. 1 Northwestern Properties Co., SW NE SE Section 20-28-4w, is spudding.

Teton County

Ned Cheadle and others' No. 1 Balsinger, NE SE NW Section 20-27-5w, cemented the 10-inch at 661 feet.

OIL YEAR BOOK

The 1934 issue of the "Oil and Petroleum Year Book" compiled by Walter E. Skinner (which has been published annually in May for 25 years) has just been issued.

Covering 458 pages the book contains particulars of 673 companies—producers, refiners, dealers, transporters and oil finance companies, including the principal American and foreign companies. Lists of officials comprise 2,586 directors, 342 secretaries and 202 consulting engineers, managers, agents, etc. The particulars of each company include date established, location of property or description of business, purchase consideration, oil production, capacity of refineries, capital, dividends and financial position.

Other useful features are the statistical tables showing the monthly production for 13 months ended April 30, 1934, of the principal British oil companies, list of 574 trade names of petroleum products and a glossary of nearly 500 technical terms and words. The book is published by Walter E. Skinner, 15 Dowgate Hill, Cannon Street, London, E.C.4. Price 7s. 6d. net, or post free. (Abroad) 9s. 6d.

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TECHNICAL QUESTIONS ANSWERED

By Charles K. Francis, Ph. D., Technical Editor

This department of The Oil and Gas Journal is devoted to the manufacturing branches of the oil industry.

Those connected with the refining of crude petroleum, the manufacture of natural gasoline and closely allied industries are invited to submit their problems to Dr. C. K. Francis, technical editor. The department was created for the purpose of aiding managers, superintendents, engineers, chemists and all those engaged in the various phases of plant operation; also those connected with marketing and utilization of petroleum products.

Questions should be submitted in as much detail as possible.

Inquiries must be signed but only the given initials will be printed. The source of the question is considered to be confidential.

Questions requiring a discussion of patents, the use of intricate formulas, extended computations, or cost estimates cannot be considered.

When the matter is of general interest the reply will be published within a reasonable time.

Lubricating Value of Oils and Use of Friction Machines

Is there any standard method of grading lubricants as to their lubricating value? Is there any machine by means of which this grading may be done? Are the results reproducible? Are the results obtained by a friction machine of any value in grading lubricants?—L. G. M.

The common method for the grading of lubricating oils is the viscosity test usually determined at two temperatures, but additional properties are often included. These may be pourpoint, carbon residue, sulphur content, flash and firepoints, color and gravity. The specifications purchased by the different departments of the State of Kansas were discussed in The Oil and Gas Journal, March 31, 1932, page 98.

Friction machines are employed to a limited extent for the investigation of lubricating oil, their value being for the testing of special lubricants, such as "extreme pressure lubricants."

There is no standard friction machine. The usual practice is for the investigator to have a machine built to his design and order. The General Motors machine, designed by J. O. Almen, is described in The Oil and Gas Journal, November 17, 1930, as follows:

The Almen machine employs a one-fourth inch diameter drill rod journal and a one-half inch split bushing made from S.A.E. 2,315 cold drawn steel. Both the journal and bushing are used in the unheat-treated, "as received" condition. The journal is polished and the bushing is ground, after splitting, on the bearing surface with a form grinding wheel. A .007-inch clearance is provided between the journal and the normal diameter of the bushing. Pressure is applied to the split bushing through a mechanical and hydraulic loading system.

The entire assembly including the oil sample cup and loading cylinder are cradled around the center of rotation of the journal. The torque developed is indicated through a second hydraulic system by the test gauge shown in Figure 1.

The machine is belt driven and is operated at a journal speed of 600 r.p.m. Two-pound weights are applied on the loading beam at 10-second intervals. The test is continued until seizure occurs or until a total of 30 pounds has been applied. Each 2-pound weight is equivalent to 1,000 pounds per square inch projected bearing area.

At the present time, these conditions for operating the machine appear to give the best correlation with actual service data on the performance of extreme pressure lubricants in rear axles employing steel on steel spiral bevel or hypoid gears. The journal speed, load and rate of load application may, however, be varied to meet individual conditions.

A simple type of friction machine was described by John S. Phelps in The Oil and Gas Journal, September 7, 1933, page 10. This is an inexpensive machine, the essential parts include a rotating spindle, speed 500 r.p.m., set beneath a weight beam, arranged to give a rubbing action on test bearings that are submerged in the oil under examination.

All friction machines for testing lubricating oils, appear to be open to the same objections, the principal ones being—reliable results as to oiliness values as obtained by a friction machine, depend upon tests being made on the same machine under a definite procedure. The kind of bearing materials must be considered, as different results will be obtained with the same oil if different bearing materials are used. Conflicting data are obtained by different operators; which means that the personal equation is a large one and that every part of the operation must be under exact control and the procedure fixed to the smallest detail. No machine has been standardized. The specifications commonly applied to lubricating oils appear to be more reliable for grading purposes than friction tests, which may be considered at the moment as a research method.

Unsulphonated Residues in Fly Sprays and Insecticides

What is meant by the term "unsulphonated residue" as used for petroleum products used in making animal fly sprays? If you could supply us with the procedure in determining the percentage we would greatly appreciate it.—W. E. W.

It is known that oils which have been treated with fuming sulphuric acid, especially those of the lubricating oil type that have not been fully neutralized and washed, may contain sulphonic hydrocarbons of the general formula R. SO_3H. Such compounds are more easily produced when certain oils are treated than some others. All acidic substances produced by the action of sulphuric acid on petroleum oils are spoken of as sulphonated products. The exact structure of all such substances is not definitely known, but it appears that they are largely sulphuric acid esters produced by the introduction of the sulphuric acid group into such compounds as the cyclic olefins. Also, true sulphonic acids may be formed to a small degree under the treating conditions. Looking at the matter from this technical standpoint it appears that an unsulphonated oil is one that contains no sulphonic acids and no sulphonated substances.

There is a complication when considering petroleum oils used as insecticides, because several vegetable and animal oils may enter into the mixture. Frequently such oils are chemically modified or may be a by-product or residue from some process involving the use of acidified oil. These are truly sulphonated oils.

The Department of Agriculture, state of California, has made extensive examinations of the composition and use of insecticides, especially those containing petroleum oils. In the 1930 Bulletin, Citrus Pest Control, it is stated: "It is now generally understood that oil injury to plants is primarily due to the presence of unsaturated hydrocarbons. By an expensive process of refinement practically all the unsaturated hydrocarbons are removed. By a less costly process of refinement, all but 8 to 10 per cent of the unsaturated hydrocarbons are removed." Also, "Numerous experiments have been made with organic oils both of vegetable and animal origin to determine their insecticidal values. It has been established that certain of these materials posesses merit as insecticides but due to the greater stability, the higher insecticidal value, the lower cost and the less injurious effects on foliage, the mineral oils have superseded the organic. Mineral oils do not become rancid, nor do they oxidize as do most of the organic. They may be said to be more stable."

The term "unsulphonated residue" as applied to insecticides, appears to have originated in California. The test was described by Gray and de Ong, California Petroleum Insecticides, Ind. Eng. Chem., 18, 177, 1926. The exact content of fuming and concentrated sulphuric acid is found by titration. These are mixed to make 37 N. Five cc. of the oil is pipetted into a 30 or 50 per cent Babcock cream-test bottle, 10 cc. of the 37 N acid added, shaken 2 minutes, 10 cc. more of the acid added and shaken another 2 minutes. The test bottle is then placed in a water-oven at 95° to 100° for 1 hour, shaking every 10 minutes. After one hour the bottle is removed, filled with ordinary sulphuric acid to bring the oil within the graduation range. After centrifuging 5 minutes the top layer of unsulphonated oil is read. The reading multiplied by 4 gives the percentage by volume of the unsulphonated oil. This subtracted from 100 gives the per cent by volume of the sulphonated oil. See also Calif. Dept. Agr. Special Publication 107, p. 16.

The unsulphonated residue should be 100 per cent for a well refined petroleum oil which has not been blended with a vegetable or animal oil. Oils for dormant spraying should have a minimum of 70 per cent unsulphonated residue; the minimum should be 85 per cent for foliage sprays.

Sprays intended for domestic use against flies, mosquitos, moths, etc., should not contain any oily or greasy material that will stain, or deposit a residue on, textile. Such sprays should be essentially fully refined volatile petroleum distillates.

Solvent Extraction Processes for Making Lubricants

What information can you give me on the purpose and method of the various solvent processes used in the production of lubricants? Once a solvent has been used, how would one determine whether or not the product was an improved lubricant? Any additional information about solvent extraction will be of extreme interest.—A. T. K.

The object of the solvent processes for the manufacture of lubricating oils is to obtain a product having improved viscosity as indicated by the viscosity index. The principal function is the removal of paraffin wax. In doing this, it has been found that the overall quality is improved by solvent methods. The carbon residue is reduced, pourpoint has been lowered to a considerable degree and color made lighter. Some of the solvent methods act to also reduce the sulphur content. All comparisons are made on the basis of the oil before and after the solvent process, or considering an oil that has been finished by conventional methods. For one to determine whether or not the solvent product was an improved lubricant it would be necessary to know what the quality was when the lubricating oil was purified by some other method.

Solvent methods for the refining of petroleum oils have been known for many years. The treatment of kerosene, Edeleanu process, with liquid sulphur dioxide at low temperature has been practiced for over 25 years. It has been demonstrated that smoke producing substances, objectionable when burning the oil in a lamp, were reduced by the sulphur dioxide process. The acetone-benzol-furfural process has been in use for over five years.

During the past three years, considerable attention has been devoted to the perfection of solvent extraction methods for making lubricating oils. At this time there are seven processes that have reached the commercial stage, with units in operation or under construction in important refineries, having a total daily capacity of finished lubricating oil of approximately 20,000 bbls. The solvents used in these plants are:

1. Acetone-benzol-furfural.
2. Acetone-benzol-nitrobenzene.
3. Dichloroethyl ether.
4. Nitrobenzene-sulphuric acid.
5. Phenol.
6. Propane-cresylic acid.
7. Sulphuric acid-benzol.

There are three general methods for applying these: (1) Single contact; (2) multiple contact; (3) countercurrent contact.

1. The solvent and oil are brought together in a single stage by agitators and then separation made by settling, decantation, or centrifuging.

2. The operation is similiar to 1, with the addition of fresh solvent as required.

3. The oil and solvent are contacted by countercurrent flow. The operation may be batch or continuous.

For an extended review of the subject of solvent extraction and dewaxing, more details of each method and a bibliography, see The Oil and Gas Journal, March 29, 1934, page 44.

FIELD PROBLEMS FROM READERS

Edited by Thomas F. Smiley

This department is conducted in order that men connected with the drilling, producing and transporting branches of the petroleum industry may obtain aid in solving problems that confront them in their work. Readers are invited to send questions freely. These questions will be placed in the hands of persons capable of answering them authoritatively, and the answers, based on the best available information, will be published.

Each question should give as much detail as possible, especially if it involves depth of sands, types of sands and operations on adjoining or nearby properties. The source of questions will be considered confidential, and only the initials of the sender will be published. Questions involving patented processes, intricate formulas or estimates of cost cannot be answered. If an immediate answer is important, one will be given by mail when the writer requests it.

In this connection, The Oil and Gas Journal will be glad to publish articles from field men who have devised new methods or improved old ones.

"Fatigue" in Sucker-Rods Caused by Repeated Cycles of Stress

The terms "fatigue" and "sucker-rod fatigue" are used a good deal in discussion of sucker-rod failures. Will you explain the precise meaning of these terms for me? And I wish you would explain just what causes this so-called fatigue in sucker-rods.—D. R. D.

No better answer to your questions could be given probably than is contained in a paper by Blaine B. Wescott and C. Norman Bowers delivered before the American Petroleum Institute last October. The following is quoted from it:

"When a metal is subjected to repeated applications or cycles of stress, whatever its nature, the process is considered to be that of fatigue. The fatigue or endurance limit then, is the greatest unit stress that may be applied indefinitely to a metal under any given set of conditions without causing it to fail. The action of cyclic stresses on a metal in the presence of a corrosive medium is termed corrosion fatigue and the corrosion fatigue limit is generally defined as the greatest stress which can be applied indefinitely to the metal without causing its failure under any given set of conditions of stress and corrosion. Thus, the term corrosion fatigue limit has come to be commonly considered as a perfectly definite physical property of a metal. This interpretation is fallacious since it is obvious that the limiting stress required to cause failure is influenced to a large extent by the rate of stress application, i.e., time of exposure to the corrosive medium. It is essential, therefore, that the conditions of test or service be rigidly defined when assigning a value to the corrosion fatigue limit of a metal.

"It is probably premature to assume that the theory of the failure of metals by corrosion fatigue is thoroughly understood, but it is of interest to consider the interpretation of the phenomenon which has obtained general acceptance. Failure from this cause occurs in two stages. During the first stage of the action the metal is subjected to damage from the two causes, corrosion and fatigue, to such a degree that failure would eventually result even if all further corrosion were arrested. Because of the electrochemical nature of the corrosion of iron and steel the action generally results in the formation of pits on the surface of the metal.

"The corrosion of sucker rods proceeds almost without exception by a process of pit formation. It is well known that the presence of sharp surface discontinuities, such as corrosion pits, results in marked stress concentration, the magnitude of which is controlled by the shape of the irregularities and the nature and physical condition of the metal. When the maximum stress (imposed by the conditions of operation and intensified by stress concentration), reaches a value higher than the endurance limit cracks form at the base of the pits by a process of slippage within the crystals of the metal.

"The formation of cracks marks the beginning of the second stage of corrosion fatigue, which consists of the propagation of these cracks by stress concentration effects of rapidly increasing intensity until the cross-sectional area is reduced to such a degree that rupture follows suddenly.

"When the imposed vibratory stresses of service are high, failure by corrosion fatigue may occur with but relatively little corrosion and little or no formation of cracks at points away from the fracture."

Often Less Expensive to Reclaim Mud Than to Use New Supply

Is there any method of reconditioning rotary drilling mud so that it can be used over and over? Is it more economical to recondition the mud than it is to dispose of it and use freshly prepared mud? What are the principal causes of deterioration of the mud?—G. F. D.

It is common practice to recondition drilling mud, which may have become unfit for use through one or more of several causes. Whether it is advisable to recondition mud or to substitute a fresh supply is something that must be determined in the light of circumstances attending the individual case.

Sometimes mud is reconditioned at the well being drilled. In other cases a central mixing and reclaiming plant is established in the field and the used mud is pumped to it for treatment. The character of the treatment depends upon the needs of the case. Sometimes the mud is gas-cut. Sometimes its colloidal quality is impaired through reaction with drilling water or water entering the hole. Often the mud becomes so heavily burdened with cuttings that it is useless.

In case the mud is gas-cut, but is not excessively laden with cuttings (or already has been cleaned of these cuttings) some operators use a spraying appliance similar to a cooling tower with louvers. The mud, after being diluted with water, is forced into a perforated pipe; and as it is sprayed through the perforations, releasing the gas in this process, it drops over baffles into a pit, where it then is thickened by settling and evaporation.

If the mud has become lumpy through chemical reaction with drilling water its usefulness can be restored only by adding fresh colloidal clay to it. A mixing device is necessary for this purpose. Colloidal clays already prepared are on the market, and they offer a ready and inexpensive method of reclaiming worn-out mud.

Vibratory screens or centrifuges are used for the removal of cuttings and sand from drilling mud. The screen, about 6 feet long and half as wide, operated by steam or electric power, is placed at an angle beside the derrick so that the mud, as it comes from under the derrick floor, runs over the screen. Rapid vibration causes the mud to work through the meshes, but particles larger than the mesh are carried to the lower end of the screen, where they fall off. Several companies make these screens. It is customary to operate the screen whenever the quantity of cuttings in the mud makes it advisable.

Where the materials for making drilling mud are inexpensive and readily obtainable, mud that is no longer suitable for use may be run into a sump or otherwise disposed of if legal or other considerations do not interfere. In most cases, however, reconditioning is probably more economical than the substitution of new mud.

Why Was It Called That?

CALCULUS

Calculus, referring to a branch of mathematics often employed by petroleum engineers, is a Latin word meaning pebble and it harks back to a practice of ancient shepherds in counting their flocks—a pebble for one sheep that passed, another for the second and so on to the last animal in the bucolic review. It was then easy to count the pebbles or arrange them in groups and thus ascertain the number in the flock and find out whether any had strayed. It hardly need be pointed out that our word "calculate" has the same origin. "Calx," from which the word "calculus" was derived, means limestone; hence, the English word "calcareous," pertaining to lime.

Gas Withdrawal Makes Marked Change in Oil Left in Sand

When gas is taken from wells in an oil field, either through carelessness or design, there would seem to be changes in the oil left in the sand in other respects than than simply its reduced capacity to flow. I would appreciate such information as you can give me regarding the change that takes place in the character of the oil as a result of withdrawal of the gas.—S. M. N.

The withdrawal of gas from an oil pool reduces the energy in the dissolved and in the free gas, causing the oil to shrink in volume, creating voids and minute bubbles within the oil body. This condition increases the resistance to flow. Increased resistance to flow also develops through increased viscosity and surface tension of the residual oil. Hence the unnecessary withdrawal of gas from an oil pool should be avoided, as such withdrawal decreases the ultimate recovery of oil and thereby violates the principles of conservation.

Ben E. Lindsley, senior petroleum engineer of the U. S. Bureau of Mines, says on this subject:

"The amount of shrinkage that an oil undergoes when gas is liberated depends upon the quantity of gas liberated and also upon its composition. A given volume of the heavier gases, propane and butane for example, will occupy more space in the oil than an equal volume of methane. The reason for this probably is that the molecules of the heavier gases are larger than those of the lighter gases.

"When gases are not in solution, and particularly when they are at low pressures, the distance between the gas molecules is so much greater than the dimensions of the molecules themselves that the mere size of the molecules has little effect upon the space occupied by the gas.

"The fact that the heavier gases occupy more space than the lighter gases in the oil, and consequently cause greater shrinkage when liberated from solution, is brought out conclusively when curves are constructed which show the volumetric changes an oil sample undergoes when gas is liberated by reducing the pressure on the oil sample.

"A well head sample of Kettleman Hills light gravity crude oil showed a total shrinkage of approximately 37 per cent. Half of this shrinkage took place in reducing the pressure from 1,672 to 273 pounds per square inch, absolute, and the other half (18½ per cent) took place in reducing the pressure from 273 pounds per square inch, absolute, to atmospheric. It required the liberation of 814 cubic feet per barrel to accomplish the first 18½ per cent reduction in volume, whereas the remainder of the shrinkage was accomplished by the liberation of 418 cubic feet per barrel.

"No data have been given regarding the increased viscosity and surface tension resulting from liberating gas from solution in oil. However, it must be apparent that increasing the specific gravity of an oil by removing its lighter constituents must result necessarily in increasing its viscosity and surface tension, because the lighter constituents invariably have low viscosity and low surface tension. The removal of constituents having low viscosity and surface tension therefore, will result in increasing the viscosity and surface tension of the residual oil."

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NATURAL GAS DEVELOPMENTS

Oklahoma Supreme Court Decision Set Precedent

Holding that a return of 7 per cent is adequate for a gas utility company to earn during a depression, the Oklahoma Supreme Court has upheld the State Corporation Commission in an appeal brought by the Consolidated Gas Service Co. against an order directing a reduction of 18 cents per 1,000 feet from 25 cents for the first 100,000 feet in the rates for natural gas charged at the city gates of Mangum and Granite.

The opinion, written by Justice Wayne Bayless, held that the 7 per cent rate will be deemed sufficient to cover all necessary tax charges. The court held that 4 per cent is an adequate depreciation allowance; that the commission retains jurisdiction over gas cases despite a long-term contract between the company and cities operating their own distribution systems; and that a public service company is not entitled to any increase in its rates in order to enable it to make donations or contributions to charitable or other civic causes.

In the opinion of Chairman Paul A. Walker and Attorney Holmes Baldridge, the decision sets a precedent for other cases pending before the commission and before the supreme court.

Mr. Baldridge said the opinion probably will result in a reduction in rates charged by the Southwestern Light & Power Co. at Altus, Okla., because that company stipulated several months ago it would cut rates 4 cents per 1,000 feet if a cut of as much as 5 cents was obtained from the Consolidated.

Still pending before the State Supreme Court are appeals of the Lone Star and Community Natural Gas companies from a commission order cutting gate rates 10 cents per 1,000 feet and directing that the saving be passed on to consumers in 26 cities and towns of southern and central Oklahoma.

COFFEYVILLE RATE

"The city of Coffeyville (Kans.) is tired of fighting for a lower domestic gas rate and never getting anywhere," City Attorney A. A. Baker said, in explaining that he and Donald Stewart, attorney for the Union Gas System, Inc., which supplies Coffeyville with domestic gas, had filed a stipulation with the State Corporation Commission at Topeka indefinitely continuing the hearing scheduled on gas rates before the commission this month.

The plan tentatively agreed upon is that each side name an engineer and they will select a third engineer to make an appraisal of the physical value of the distributing plant with a view to calling an election to vote bonds for its purchase if the price is believed reasonable by the city commissioners.

ORDER ARIZONA REDUCTION

PHOENIX, Ariz., June 9.—The Arizona State Corporation Commission has ordered the Central Arizona Light & Power Co. to reduce its rates for gas about 32 per cent. The reduction is effective June 1.

UNITED GAS REPORT

NEW YORK, June 11.—United Gas Corp. reported net income for the fiscal year ended April 30, of $3,188,167, compared with $4,180,529 in the preceding 12 months. Total operating revenue for the 12 months aggregated $21,892,910, compared with $22,262,311, while net earnings of subsidiaries amounted to $6,183,868, compared with $7,231,054 in the preceding year. Gross income of the parent company amounted to $6,212,998, compared with $7,236,937.

Way Cleared for Hearings by Kansas Supreme Court

TOPEKA, Kans., June 11.—The Kansas Supreme Court cleared the way for further Cities Service Gas Co. rate hearings before the State Corporation Commission by allowing the commission's application for a writ to compel 10 distributing concerns to appear before it in accordance with a previous order of the regulatory body.

Mandamus proceedings had been filed by the commission after the 10 Cities Service gas distributing companies had secured an order from Shawnee County District Court restraining the commission from proceeding with a hearing ordered for last March 15.

In its opinion, the court allowed the writ and said the commission should proceed to consider the record made heretofore in a previous hearing, following which the commission found 30 cents, rather than 40 cents to be a reasonable charge for 1,000 feet of gas at the city gate, and bring the record up to date so that a reasonable city gate charge to each distributing company "may be ascertained as an element in a consumer's charge."

Michigan Bureau Report on Natural Gas Reserves

DETROIT, Mich., June 9.—Present consumption of natural gas from Michigan Fields averages between 6,500,000 and 7,000,000 feet a day with every pool of commercial size, except one, having a market outlet for its gas. The exception is isolated by location and economic considerations. Despite optimistic opinion as to the extent of the State's gas resources, no excess production and no excess reserves have yet been discovered, according to a recent survey of the Utilities Information Bureau of Michigan.

Thus far, in four Central Michigan counties, five pools have been found and proved, in which quantities are large enough to warrant commercial development, including transportation to available and potential markets. Estimated reserves for these pools range from 20,000,000,000 to over 40,000,000,000 feet.

Production in Michigan last year of 1,697,628,000 feet included 545,629,000 feet of casinghead gas which, not being economically suitable for natural gas service, was used in making of gasoline and in field operations.

Fifty wells are now completed and 10 more are drilling. The areas now served have a population of approximately 225,000 people.

HEARING ON GUYMON PLANT

Final hearing on application of R. L. Jackson and others for permit to build a carbon black plant near Guymon, in the Oklahoma Panhandle, is set for Wednesday, June 13.

Geologists testified at a recent hearing in the case that the area the plant would take gas from is the center of a huge undeveloped gas reservoir extending from Kansas, across the Panhandle, into Texas. This application is opposed by representatives of several natural gas distribution companies, which contend the gas should be conserved for better uses.

Helium Plant at Dexter Closed Awaiting Market

One of the three helium gas fields in the world, located at Dexter, Kans., in the heart of Cowley County's agricultural region, has been capped and that little community of 500 persons has lost its most important industry, says the Kansas City Star.

Following the withdrawal of Federal contracts for the gas, production at the plant has been curtailed to such an extent that only one man now is retained on duty, more as a general caretaker of the property than anything else.

The two other helium fields are in Thatcher, Colo., and Amarillo, Tex. The Thatcher and Dexter Fields, both controlled by the Goodyear Zeppelin Co., have been shut down, leaving only the government-controlled Amarillo Field in operation.

When the gas was first discovered here in 1903, Dexter experienced the most bitter disappointment in its history. Two men named Paulen and Bagnall bored into the earth one day and at a depth of 480 feet they struck a terrific flow of gas. The pressure was so great that the roar could be heard for miles.

Dexter was happy. Citizens believed they could pipe the gas to their homes and make a great step in modern progress by heating their homes with gas. They were finished with carrying coal and chopping wood, they thought.

The town planned a great celebration. The big day arrived. Flowery speeches were delivered and a torch was applied to the escaping funnel of gas. It was promptly blown out. Succeeding torches met the same fate. The gas refused to burn and visitors giggled and went home. For a time Dexter was "razzed" unmercifully about its "asbestos gas."

Two years later J. W. Smith, with W. E. Merydith as his partner, came to Dexter and drilled another well. It came in a gasser and the stuff refused to ignite.

Smith and Merydith experimented and discovered that when the gas was once lighted it would continue burning and make an extremely hot blaze. To prove it they lighted the well and kept it burning for six weeks. The two men obtained a franchise and piped the town for gas. However, the new fuel was not convenient and required a lot of trouble to light and the business fizzled out.

Later samples of the gas were sent to Prof. H. C. Cady, head of the chemistry department at the University of Kansas. He found that the gas contained helium—an element whose value was not understood at that time.

It was not until the war that Dexter thought it might realize some profit on its abundant, but mysterious gas. Experiments proved that helium was valuable because it was light and noninflammable, and ideal for use in dirgibles and airplanes.

A government agent visited Dexter and there was talk that a Federal plant would be built. Then the war ended and so did the talk of a helium plant. Next a "scientist" came in and talked of using helium to make rain.

In 1927, the Government again became interested in the Dexter Field and awarded a contract for the extraction of the helium to a company which built a large plant at Dexter. Control gradually passed into the hands of the Goodyear company which purchased the majority of the output.

Today the Dexter plant is almost deserted. More than 4,000 cylinders still are piled in neat stacks in the yards and only a few of these are ever filled and shipped—not for dirgibles, but for laboratory purposes! W. T. Abbott, New Jersey engineer, is the sole manager, chemist, tester, worker and caretaker of the once flourishing industry.

Improvement Reported by Jersey Subsidiaries

For the older natural gas subsidiaries of Standard Oil Co. of New Jersey, in localities of Ohio, Pennsylvania and West Virginia, the second half of 1933 brought marked improvement in business over the first six months and over 1932. Volume of sales was practically the same as for 1932, but gross revenue was reduced about 7 per cent, reflecting the trend toward lower rates which came into effect in 1930.

"The younger natural gas pipe lines in which the company's interests vary from a small minority to control," says the company, "were of course materially affected by the inability of industries to operate up to the fuel demand, which invited the construction of such new lines. Interstate Natural Gas Co., which is largely dependent upon manufacturing activity in Baton Rouge and New Orleans, transported about the same quantity of gas as in 1932, in which year it showed a loss of 13 per cent from 1931.

"Colorado Interstate Gas Co.'s sales decreased 5.6 per cent, accounted for by unusually mild weather in the Denver district last winter. Mississippi River Fuel Corp. reflected increased industrial activities in St. Louis by a gain of 18 per cent. Natural Gas Pipe Line Co. of America experienced a satisfactory gain in its second year of carrying gas from Panhandle district in Texas to Joliet, Ill. The New York State Natural Gas Corp., selling to distributing companies in Syracuse, Ithaca and adjacent localities, is gradually building up its deliveries."

TO REDUCE AUBURN RATES

AUBURN, N. Y., June 9.—Gas rate reductions, as high as 8 per cent, would be effected in Auburn and vicinity with the introduction of natural gas in this vicinity, according to a letter submitted to the Auburn City Council by H. O. Palmer, Geneva, president of the Empire Gas & Electric Co. The proposed reduced rates would be contingent on the continued purchase of electricity from the Empire company by consumers in this area. The reductions would mean savings of $53,700 to residence consumers and $7,700 to commercial consumers, Mr. Palmer said.

VALUATION INCREASED

The Lone Star Gas Co. has received an $800,000 increase in its 1934 tax assessment over its vountary return from the Oklahoma state equalization board. The board, dismissing the company's protest, voted to make final a $2,533,404 assessment.

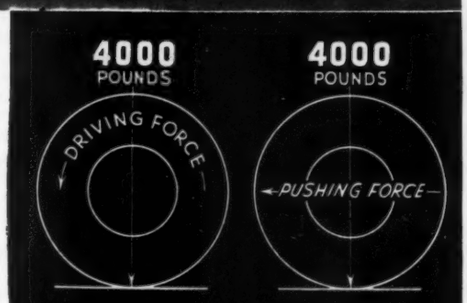
Attorneys dismissed the complaint by the Community Natural Gas Co., an affiliated concern, against a $488,345 assessment, $88,000 more than the voluntary return. Both companies are engaged in a supreme court fight against a rate reduction ordered for 26 cities by the corporation commission.

WESTERN UNITED RATES

CHICAGO, June 9.—Hearings by the Illinois Commerce Commission on its citation of Western United Gas Co. to show cause why rates should not be reduced in respondent company's territory and which had been scheduled for May 29 have been continued to June 5.

Controlled Power

The set-back front axle design of the FWD places more of the gross weight on the front axle. Because the front axle of the FWD is also a driving axle, all of the weight carried on this axle is available for driving the truck. With both power and weight on the front axle of the FWD, the driver has better control over the truck. Consequently there is not the danger of sluing or skidding on slippery or icy roads or on curves. The front wheels of the FWD grip the road. This safety feature is of importance to you, not only in handling a liquid bulk load where the shifting of the load in the tank is a constant hazard, but also in the transportation of all heavy, bulky loads at the higher speeds required today. This fundamental principle of load distribution has been one of the basic advantages of all FWD trucks. The increased load carried on the front driving axle of the FWD permits the truck to haul a greater gross load in twenty-two states, due to axle and gross load restrictions, than with a truck of ordinary design. Investigate the FWD for your hauling problems, fill in coupon below.



Weight on the wheels of a truck increases the traction in direct proportion to the weight carried. Since the weight of the FWD truck with its load is carried on its four driving wheels, none of the traction available on each wheel is wasted. The weight carried on the front driving axle of the FWD truck is available for driving the truck just as well as the weight on the rear driving axles—not a pound of weight is wasted, all is used to give the FWD the maximum in performance.

In a non-driving front axle, the type used on rear-drive trucks, all of the weight carried on the front axle is wasted, insofar as propelling the truck is concerned. Only the weight on the rear axle in this type of truck is available for moving the load. Shifting more of the weight to the non-driving front axle to meet legal requirements robs the rear axle of its traction, which further reduces the performance of the truck.

Note set back front axle design of FWD to provide greater weight on front axle

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City_____ State_____

PERSONAL PARAGRAPHS

H. C. MATHENY has been employed by the Sinclair Prairie Oil Company as a geological scout and will have headquarters at Houston, Tex.

* * *

L. W. HEWITT, geological scout for the Sinclair Prairie Oil Company at Houston, Tex., is on a three weeks' leave of absence due to illness.

* * *

T. O. MATKINS, formerly with the Humble Oil & Refining Company in the West Texas district, has been assigned as geological scout in East Texas, with headquarters at Tyler.

* * *

E. A. SATCHELL, production manager of the Iraq Petroleum Company, Ltd., has left London, England, for Iraq, where he will be for several weeks.

* * *

ROBERT N. WAGNER, of the Wagner Engineering & Equipment Corporation, Four Sands, Tex., was a Fort Worth and Dallas visitor. While in Fort Worth he participated in the Texas Bridge Tournament.

* * *

FLOYD J. NICHOLSON, who has been connected with the land department of the Sinclair Prairie Oil Company, Fort Worth, Tex., has resigned and taken a position in the land department of the Shell Petroleum Corporation at Houston, Tex.

* * *

W. W. DONALDSON, engineer in the pipe line division of the Pure Oil Company, has been transferred to Mount Pleasant, Mich., to become assistant to SUPERINTENDENT D. E. BEACH. EARL A. RUSSELL, who was at the Drumright, Okla., station, succeeded Mr. Donaldson.

* * *

GLEN M. RUBY, California geologist and oil executive, has purchased a ranch on the Green River in Utah, 20 miles below the town of Greenriver. Mr. Ruby was formerly located in Denver, Colo.

* * *

GERALD H. WESTBY, Seismograph Service Corporation, Tulsa, addressed the A.P.I. Kansas Chapter at its monthly meeting held in Wichita, Kans., on June 9, on "Fundamentals of Geophysics."

* * *

E. E. (CHICK) LAMBERT, formerly with the American Cable Company, is now representing A. Leschen & Sons Rope Company, of St. Louis, in Fort Worth, Tex., and will cover West Texas, the Panhandle and the Wichita Falls district.

* * *

G. DESCHATRE is to become temporary manager of the Schlumberger Prospecting Company, Houston, Tex., when J. L. MATHIEU leaves on a three or four months' trip to his native country, France, where he will do research work for his company.

* * *

CAMPBELL HUNTER, of London, England, British geologist, who has done extensive work in the Alberta oil fields, is in Calgary in connection with the drilling being carried on by the Hunter Valley Oil Company, of which he is president.

* * *

ERNEST A. HANSON, deputy supervisor, U. S. Geological Survey, Tulsa, left on a trip June 6 that will take him and his wife through New Mexico and Arizona to California. Part of the time Mr. Hanson will attend to survey matters and plans a short vacation before returning to Tulsa in about two weeks.

D. J. BRINSLEY, manager of the harbor fleet of the Standard Oil Company of New Jersey, has retired after 42 years of continuous service.

* * *

W. W. LECHNER, of the firm of Lechner & Hubbard, of Dallas, Tex., was in Houston, Tex., during the latter part of the week on business.

* * *

W. I. NOWLIN, of Dallas, Tex., with the pipe line department of the Atlantic Oil Producing Company, was in Houston, Tex., during the past week on business.

* * *

COL. R. W. STEWART, former chairman of the board of the Standard Oil Company (Indiana), returned from a European trip June 7 on the Conte Do Savoia of the Italian line.

* * *

A. E. FAGAN, assistant treasurer and secretary of the Cooper-Keller Oil Company, Houston, Tex., left for Chicago during the past week to attend the Century of Progress. He was accompanied on the trip by MRS. FAGAN.

* * *

CHARLES JACOBSEN, of Lake Charles, La., in charge of Barnsdall Oil Corporation's operations in the area, was in Tulsa during the past week on business. He also attended the graduation of his son from high school in Tulsa.

* * *

J. H. HOWARD, chief engineer, and BUCK WEAVER, sales representative, of J. H. McEvoy & Company, manufacturers of oil well completion equipment and hydraulic blowout preventers, Houston, Tex., are spending some time in Tulsa and the Mid-Continent, making a survey of business conditions.

MISS WORDENA SWISHER, assistant technical librarian, technical department, Tulsa Public Library, is on a vacation trip in New Mexico.

* * *

W. T. WELLS, of the Lane-Wells Company, Los Angeles, Calif., is in New York on a business trip. He will return to California via Houston, Tex.

* * *

C. E. EVANS-LOMBE is district manager of the Oil Countries Specialties Manufacturing Company, which has opened district offices in the Fort Worth Club Building, Fort Worth, Tex.

* * *

B. SMITH, gauger for the Cosden Pipe Line Company, in the Bristow, Okla., area, has been transferred to Shidler, in Osage County, Oklahoma, as a result of the new development in the Burbank Field.

* * *

JAMES F. ORR, formerly commercial manager of the United Gas System, Houston, Tex., has been elected vice president and commercial manager of the Central Illinois Public Service Company, of Springfield, Ill.

* * *

DR. S. H. KNIGHT, state geologist and head of the geology department at the University of Wyoming, has chosen two assistants, R. H. BECKWITH, associate professor of geology, and H. D. THOMAS, assistant professor of geology at the university.

* * *

J. HARVEY WILSON, of Artesia, N. Mex., has been made district superintendent of the Pecos Valley Gas Company and the Gas Company of New Mexico. These companies supply gas to Tucumcari, Clovis, Portales, Lovington, Hobbs, and a number of other towns in the Pecos Valley.

* * *

S. R. BASHAW has returned to Aztec, N. Mex., after a visit to his home in California. Mr. Bashaw is starting drilling operations in Liberty Valley, San Juan County, New Mexico.

* * *

JOHN CARR and MRS. CARR and MRS. B. S. COLLINS, of Kansas City, Mo., are spending some time at Basin, Wyo. They are interested in the development of the Torchlight Field.

* * *

W. O. GEORGE, geologist, and ALFRED FOOTE, land man and engineer with Eastman, Gardner & Company, Laurel, Miss., spent several days in Houston and San Antonio, Tex., on business.

* * *

F. B. DUNLAP, National Transit Pump Company, Tulsa, talked to the Kansas Chapter of the A.P.I. Division of Production at the June meeting in Wichita, Kans., on "Use and Care of Multicylinder Engines in Oil Field Pumping Installations."

* * *

T. J. DONOGHUE, executive vice president, the Texas Company, Houston, Tex., accompanied by MRS. DONOGHUE, attended the graduation exercises of their daughter from Merrymount School, Tarrytown-on-the-Hudson, New York. They have returned home after a short visit with their son in Palestine, Tex.

* * *

MISS BETTY KELLETT, one of the few women geologists employed in the Mid-Continent fields and who has been associated with the Amerada Petroleum Corporation in the Wichita, Kans., office as micro-paleontologist for the past five years, is to be married to EDOUARD HOLLIS NADEAU, of Providence, R. I., on June 30, at Lake Charles, La.

DO YOU REMEMBER?

From The Oil and Gas Journal Files

25 Years Ago

June 14, 1909

The big oil companies in Oklahoma, Prairie, Gypsy and Texas, are buying producing oil properties in the Glenn Pool wherever they can make a deal with the owners, and it will be only a matter of time until most of the field, developed by individuals and firms, will be owned by the big corporations who offer good prices for the properties.

Sid Keoughan, drilling under contract with the Livingston Oil Company, completes the first well near Livingston, Mont. It was dry at 1,150 feet, but another test will be drilled.

A St. Louis syndicate, headed by Adolphus Busch, pays $7,480,000 for seventy-four-eighty-fifths of the stock of LaClede Gaslight Company of St. Louis. It is the intention of the new owners to pipe gas from the Caddo Field, Louisiana to St. Louis.

20 Years Ago

June 18, 1914

Some of the wiseacres think that if Standard Oil Company officials do not make up their mind about the pipe line from Oklahoma to Baton Rouge, La., the Royal Dutch-Shell will beat them to it.

The largest individual producer in the world is said to be W. C. McBride, of St. Louis, who has interests in Pennsylvania, Illinois, Oklahoma and Texas.

Frank P. Peterson has resigned as general manager of the Riverside Western Oil Company.

The Cushing Field is producing 152,000 bbls. a day, and only curtailed drilling is keeping it under the 200,000-bbl. mark.

10 Years Ago

June 12, 1924

Parking laws are not new. Schenectady, N. Y., had one in 1800 which put a six-hour limit on vehicles parked within the city.

Cromwell, Seminole County, the latest new field in Oklahoma is being boomed as "another Cushing."

Magnolia on June 6 cuts crude oil prices. It pays from 90 cents to $1.50 in Oklahoma, Kansas and North Texas. Other companies pay from $1.25 to $2.25 in the same territory.

Since 1912 the Maidan-i-Naftun oil field in Persia has not had a dry hole and has never been troubled by water. Meanwhile it has a producing capacity of over 5,000,000 tons of oil, or about 35,000,000 bbls. per year with limited drilling.

JON LONG, of the Petroleum Equipment Company, Fort Worth, Tex., has just returned from a business trip to New York.

* * *

HARRY C. HANSZEN, independent oil man, Houston, Tex., and MRS. HANSZEN, have been in Dallas, Tex., on a short visit.

* * *

E. J. BROBERG, field engineer, Parkersburg Rig & Reel Company, Houston, Tex., was in Tulsa for a short visit last week.

* * *

MR. and MRS. T. K. BISHOP have returned to their home in Basin, Wyo., after a visit in West Virginia and Maryland with relatives and friends.

* * *

R. F. GARLAND, discoverer of the Seminole Field, Oklahoma, who has recently been operating out of San Antonio, Tex., has moved to Dallas, Tex.

* * *

WILLIAM HENDERSON has returned to Petrolia, Ontario, on a three months' furlough from Negritos, Peru, where he has been in the employ of the International Petroleum Co.

* * *

W. W. ROBINSON, JR., formerly director of gas research for the Texas Company at Beacon, N. Y., has been appointed chief chemist of the gasoline division of the company at Long Beach, Calif.

* * *

LOMA WHITE, who has been secretary to DANIEL MAHONEY, head of the Stanolind Crude Oil Purchasing Company department at Fort Worth, Tex., has been transferred to the company's offices in Tulsa.

* * *

W. L. CONNOLLY, chairman of the board, Sinclair Prairie Oil & Gas Company; HORACE FITZPATRICK, W. W. BAKER, C. H. RUTHERFORD, and C. H. PARRISH, recently inspected Wyoming properties.

* * *

HUGH STEWART, chief geologist for the western division of Texas Company, Denver, Colo., was in Casper, Wyo., on business connected with the U. S. Geological Survey.

* * *

SAMUEL LaBRYON, formerly with Sinclair Prairie Oil Company in the Seminole Field, is now superintendent of production for Springrose Drilling Company of Oklahoma City, Okla.

* * *

DAVID V. STROOP, staff engineer of the American Petroleum Institute, addressed the fire and safety marshals of the National Petroleum Association at their meeting Friday at Warren, Pa.

* * *

W. A. SNYDER, production superintendent in Oklahoma and Kansas of the Atlantic Oil Producing Company, has resigned, to become a drilling contractor. He will be temporarily located in Kansas.

* * *

H. K. DAVIS, economist for the Western Petroleum Refiners Association in Tulsa, has resigned and will leave for Washington, D. C., shortly where he will join the staff of the Planning and Coordination Committee.

* * *

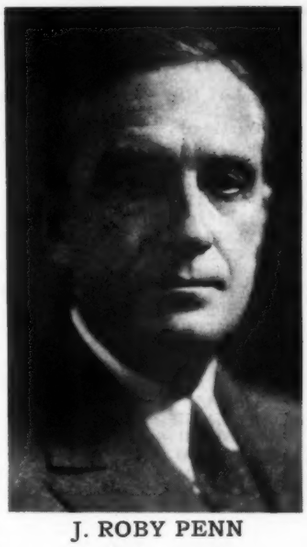
GEORGE RIGGS, at one time a geologist for Midwest Exploration Company, and later with Stanolind Oil & Gas Company, is now district geologist in the Panhandle Field of Northwest Texas for Skelly Oil Company.

* * *

GEORGE W. STRAKE, independent operator, Houston, Tex., and discoverer of the Conroe Field, has joined the ranks of that swelling group of oil men who have taken to the air for getting around their operations. Mr. Strake has recently acquired a new cabin job and now is a frequent visitor to Louisiana, Mississippi, and other points. He recently flew from Washington to Houston in a little over nine hours.

Mr. Penn Back as President Again

J. Roby Penn, who resigned as president of the Texas Pacific Coal & Oil Company, in 1928, has resumed that office, succeeding Edgar J. Marston, who retired on account of ill health.



J. ROBY PENN

Mr. Penn's whole life has been passed in an atmosphere of oil. He was born in 1875 in Reno, Pa., early oil town, where his father, John R. Penn, was one of the organizers and treasurer of the Reno Oil Company. After attending the public schools in Oil City, Pa., he entered Amherst College. College days over, he went to work for the Ohio Oil Company in Oil City. In 1900 he was transferred to Findlay, Ohio, and in the course of time was placed in charge of the land department, serving under J. C. Donnell, through Ohio, Indiana, Illinois, and Wyoming.

In 1914 Mr. Penn was made president of the Illinois Pipe Line Company when it was segregated from the Ohio Oil Company. Three years later he was chosen vice president of the Midwest Refining Company, which required him to go to Denver, Colo. In 1919 Mr. Penn was named assistant to the president of the Texas Pacific Coal & Oil Company and moved to New York. Following two years in this post he was made president of the company, going to Fort Worth, Tex., where it has its main offices and a refinery. He continued as president of the company till 1928, when he resigned to give more time to private interests. He remained on the company's board of directors. Recalled to the presidency of the company, he has moved his offices up seven floors in the Fort Worth National Bank Building to join his associates.

Mr. Penn is active in civic affairs and is a member of the Fort Worth city council. He also is a member of the Rivercrest Country Club and the Fort Worth Club. In 1918 he married Mrs. Olive Y. Waltman and they have one son.

MR. and MRS. E. A. KONANTZ, of San Pedro, Calif., were visitors recently at Cut Bank, Mont.

* * *

VALENTINE M. KIRK, of Frannie, Wyo., discoverer of the Frannie oil field and head of the Kirk Oil Company, has returned to Frannie after a short stay at the Mayo clinic in Rochester, Minn. Mr. Kirk returned to Wyoming much improved in health.

* * *

PETER Q. NYCE, of Washington, D. C., FRED C. GIER, of Bridgeport, Conn., and EARL W. READER, of Rock Springs, Wyo., were in Casper, Wyo., in consultation with the Ohio Oil Company officials over unit operations on the Hiawatha structure in northern Colorado.

* * *

JOHN McFADYEN, vice president and manager of the western division of the Ohio Oil Company, has returned to Casper, Wyo., after a trip to Findlay, Ohio, where he attended the annual meeting of the stockholders of the company. While in the East he made a business trip to Toronto, Canada.

* * *

WARHAM PARKS, formerly a scout with the Gypsy Oil Company, has joined the Darby Petroleum Company and has been sent to Kansas as field scout. In the early days of the Valley Center area, he worked for the Bu-Vi-Bar Oil Company. He succeeds RODNEY BOTHWELL, transferred to San Angelo, to cover West Texas.

* * *

JOHN C. HOPKINS has been appointed district sales manager of the Cleveland office of General Refractories Company, Philadelphia. He was formerly associated with the Central Furnace Division of the American Steel & Wire Company, Cleveland. In December, 1922, he was appointed superintendent of the Central furnaces and in 1929, general superintendent of blast furnaces and steel plants, serving in this capacity until recently. JAMES P. RAUGH is associated with the same office.

GRAY S. RANKIN, of Sunburst, Mont., official of the Texas Company, visited Lethbridge, Alberta, recently.

* * *

HUGH CURROUGH, engineer for the Empire Oil & Refining Company, left Tulsa Saturday to spend several days at the company's East Chicago refinery.

* * *

W. W. LOWE, of the New York offices of Cities Service Company, spent several days in the Mid-Continent area during the past week, visiting the company's refinery offices.

* * *

DR. R. L. HUNTINGTON, associate professor in the school of petroleum engineering at the University of Oklahoma, was in Tulsa last week, returning to Norman, Saturday.

* * *

B. E. HULL, president of the Texas Pipe Line Company, Houston, Tex., flew to Findlay, Ohio, making the trip in the large, new ship which the company has just acquired for his use.

* * *

T. J. McMAHON, vice president of the Texas Pipe Line Company, Houston, Tex., is located temporarily at Tyler, Tex., where the company has established offices. He returns to his home in Houston over the week-ends.

* * *

B. P. COOPER, president of Cooper-Keller Oil Company, left Houston, Tex., a few days ago for the company's Minneapolis, Minn., office, where he will remain the next 90 days. En route north, Mr. Cooper spent a few days in North Texas and in Tulsa with refiners at these points.

* * *

ALDEN DONNELLY, scout for the Honolulu Oil Company, Midland, Tex. has been elected secretary of the Midland Oil Scouts Association, succeeding R. E. WITTY, land man for the Texas Company, who was recently transferred to Fort Worth, Tex., from Midland.

* * *

H. B. TAUBMAN, president of Taubman Supply Company, is convalescing from an appendicitis attack.

* * *

MARVIN A. SMITH has been made manager of the new Tulsa office of the insulation division of the Eagle-Picher Sales Company. The metals department here is headed by F. W. C. BAILEY.

* * *

PAUL CLARKSON, manager of the southern Oklahoma division of Continental Supply Company, has resigned, and will become an oil operator in the East Texas Field. He will retain his home at Ardmore, Okla.

* * *

B. R. CARNEY, of the Shell Petroleum Corporation, East Chicago, Ind., has been appointed a member of the Committee on Disposal of Refinery Wastes, a group working with the American Petroleum's Division of Refining. He succeeds CARL BARKER, of the Shell Petroleum Corporation, St. Louis, Mo.

* * *

HAL W. STEWART, of Findlay, Ohio, attorney for the Ohio Oil Company and affiliated companies, is spending a few days at the Casper, Wyo., offices of the company. Mr. Stewart was formerly attorney for the company in Casper. He is accompanied by MRS. STEWART and their son. Before returning East, he will drive to Montana for a visit with his mother and other relatives.

* * *

JOHN P. KLEP, graduate student of the University of Oklahoma in petroleum engineering, Fellow of the C.R.B. Educational Foundation of Brussels, Belgium, and New York City, received his Masters Degree in petroleum production engineering last week. He sails for Europe on the White Star "Majestic" from New York City, June 20, landing at Cherbourg, France, from which port he goes to Spain and then to Belgium to make application for re-entry into the United States this fall.

MARKET RECORD OF OIL SECURITIES

Active Oil Stocks Listed on New York Stock Exchange

Compiled by Carl H. Pforzheimer Co., 25 Broad Street, New York City, Members New York Stock Exchange and New York Curb Exchange

1934 High	1934 Low	Week ended June 9 Sales	Week ended June 9 High	Week ended June 9 Low	Week ended June 9 Close	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	1933 High	1933 Low	1932 High	1932 Low	1931 High	1931 Low
55⅝	41½	11,200	55⅝	50¼	54½	Amerada Corp.	767,375	N.P.	50eQ	1-31-34	47⅝	18½	22¾	12	23	11¼
35¼	21¾	14,300	27⅞	24	27¾	Atlantic Refining	2,665,234	$25	25eQ	6-15-34	32½	12⅝	21⅞	8⅝	23⅝	8⅝
10	7	10,900	8⅝	7½	8¼	Barnsdall Corp.	2,248,795	$5	....	5-11-31	11	3	7	3⅜	14½	4
19¼	11⅛	28,900	13⅞	12⅛	13⅞	Columbia Gas & Elec.	11,610,036	N.P.	12½eQ†	5-15-34	28½	9	21	4¼	45⅝	11⅝
14¼	9½	35,400	11⅝	10¼	11⅝	Consolidated Oil Corp.	14,218,835	N.P.	28c	4- 7-34	15⅜	5	9	4	15⅞	4⅛
22¾	16½	42,700	22¼	18⅞	21⅞	Continental Oil of Delaware	4,738,593	$5	25c	4-30-34	19⅝	4⅞	9⅝	3⅝	12	5
22¼	15⅛	3,100	19½	18	19⅜	General Asphalt	387,149	$10	....	6-15-32	27	4⅝	15½	4¾	47	9⅝
5⅜	3¼	2,500	4¼	3¾	4¼	Houston Oil (new)	1,098,618	$25	....	10-17-30	7⅜	1⅞	5⅜	1⅛	14⅛	3
3⅜	1¾	700	2¼	2	2¼	Louisiana Oil Refining	1,302,158	N.P.	....	.....	4	⅝	2¼	½	4½	1
14¾	11	12,800	14⅛	12¾	14	Mid-Continent Petroleum	1,857,912	N.P.	25c	5-15-34	16	3¾	8⅞	3⅜	16⅜	5
20¾	11½	2,600	18½	16⅜	18¼	National Supply of Delaware	382,591	$25	....	5-15-31	28⅝	4	13	3½	70¼	5
15⅞	10½	20,800	12¾	11½	12½	Ohio Oil Co.	6,563,107	N.P.	15c	6-15-34	17⅝	4¾	11	5	19½	5¼
8⅝	6½	1,000	7¾	7⅛	7¾	Pacific Western Oil	1,000,000	N.P.	25c‡	10-25-33	9½	3	8	3	15	2⅞
2½	1¼	1,500	1½	1⅜	1½	Panhandle P. & R.	198,770	N.P.	....	.....	4¼	⅜	1¼	¼	4¼	⅜
20¾	15⅛	22,700	20	18½	19⅝	Phillips Petroleum	4,154,687	N.P.	25c	5-14-34	18¾	4¾	8½	2	16⅝	4
16¾	10	7,200	13⅜	12¼	13¼	Plymouth Oil Co.	990,261	$5	25eQ	3-31-34	17⅝	6¾	12½	6	19	6
14⅞	9⅜	10,400	11½	10	11½	Pure Oil	3,038,370	N.P.	....	9- 1-30	15⅜	2½	6½	2⅞	11⅞	3¼
39⅛	33	1,100	35	33⅛	35	Royal Dutch N. Y. shares	432,224	$14	$1.07½	8-14-33	39¾	17⅝	23¾	12½	42⅝	13
38⅜	25⅜	10,400	35½	30½	35⅜	Seaboard Oil of Delaware	1,204,460	N.P.	15eQ§	6-15-34	43⅜	15	20⅜	6⅝	20¾	5½
11⅞	7⅝	8,700	8⅞	8	8⅝	Shell Union Oil	13,070,625	N.P.	....	6-30-30	11⅝	4	8⅜	2½	10¼	2⅛
89	58	700	75	73¾	74½	Shell Union Oil pfd.	400,000	$100	....	7- 1-31	61	28½	65¼	18	78	15
11¼	8¼	6,300	10½	9⅝	10⅜	Simms Petroleum	461,000	$10	25c	1-17-34	12⅜	4⅞	7½	3¼	11	3½
11½	7⅞	1,200	10¼	9¼	10¼	Skelly Oil	1,008,514	$25	....	12-15-30	9⅞	3	5⅜	2½	12⅞	2
19⅞	14	38,000	16¾	15⅛	16⅝	Socony-Vacuum	30,905,006	$25	15eQ	6-15-34	17	6	12¼	5¼	21	8⅝
42⅞	30⅝	27,900	37½	32⅛	37	Standard Oil of California	13,102,900	N.P.	25c	6-15-34	45	19½	31⅞	15⅛	51⅜	23¼
41	33⅞	300	38⅝	38¼	38¼	Standard Oil of Kansas	200,000	$10	50eQ	7-31-34	39⅞	12¾	16½	7	19	7⅜
50⅛	41⅛	28,700	46⅛	42½	46	Standard Oil of New Jersey	25,740,965	$25	50eSA	6-15-34	47½	22¾	37⅝	19⅞	52½	26
63	51½	2,300	63	59¼	62½	Sun Oil	1,733,013	N.P.	25eQ	6-15-34	59	35	39⅞	24⅜	45¼	26⅜
29⅜	21½	17,700	25⅞	23⅜	25⅝	Texas Corp.	9,352,371	$25	25eQ	7- 1-34	30⅛	10¾	18¼	9¼	36¼	9⅞
6½	3⅛	2,700	4⅜	3⅞	4¼	Texas Pacific Coal & Oil	880,703	$10	....	12-31-29	6½	1⅜	4	1½	6½	1⅞
14¼	8½	27,000	14¾	12	13½	Tide Water Associated	5,618,672	N.P.	....	2-16-31	11⅜	3½	5⅝	2	9	2¼
84¾	64½	600	83	81	81	Tide Water Associated pfd.	666,524	$100	$1.50Q	4- 1-34	65¼	23½	60	20	68	20½
20½	15	10,100	17½	15⅜	17⅛	Union Oil of California	4,386,070	$25	25eQ	5-10-34	23⅜	8½	15⅝	8	26⅝	11
21	15¾	600	20	19½	20	Union Tank Car	1,200,000	N.P.	30eQ	6- 1-34	22¾	10½	19¼	11¾	25⅛	16
5¾	3½	1,400	4⅜	3¾	4⅜	Wilcox Oil & Gas	424,839	$5	....	5-10-28	5½	2	8¾	2¾	9⅜	2¾

*Ex-dividend. †Payable in 5 per cent convertible preferred stock. ‡Initial dividend. §Plus extras.

Active Oil Stocks Listed on New York Curb

Compiled by Carl H. Pforzheimer Co., 25 Broad Street, New York City, Members New York Stock Exchange and New York Curb Exchange

1934 High	1934 Low	Week ended June 9 Sales	Week ended June 9 High	Week ended June 9 Low	Week ended June 9 Close	Stocks—	Total shares outstanding	Par value	Dividend rate	Payable or last paid	1933 High	1933 Low	1932 High	1932 Low	1931 High	1931 Low
38	31¾	50	35½	35½	35½	Buckeye Pipe Line Co.	200,000	$50	75eQ	6-15-34	39¾	25	35	17½	56	30
5½	2⅝	2,000	3¾	3⅛	3¼	Caribb Syndicate	579,000	25c	....	.....	7⅜	¼	⅝	¼	2⅜	⅛
126½	116	50	120¼	120¼	120¼	Chesebrough Mfg. Co.	120,000	$25	$1Q†	6-29-34	129	71	90	53	129½	75
4¼	1⅝	24,600	2½	2⅜	2½	Cities Service	37,804,394	N.P.	....	6- 1-32	6¼	1½	6⅞	1¼	20⅜	5
3¼	1¼	700	2¼	2⅛	2¼	Colon Oil	2,200,000	N.P.	....	.....	4	¼	1¼	¼	3⅛	⅛
3⅞	1⅝	700	2½	2⅛	2½	Cosden Oil	399,687	$1	....	.....	3⅜	1⅜	2⅞	⅛	3⅝	⅜
13⅜	9⅝	14,100	13⅛	12⅛	13⅛	Creole Petroleum	6,974,356	$5	....	.....	12	4¾	3⅛	1⅜	3⅞	1⅝
7½	4¾	700	7	6⅝	7	Darby Petroleum	509,696	$5	25c	2-15-34	8	2⅛	7⅛	1⅝	2½	1⅝
2¼	1⅝	No sales	..	..	..	Derby Oil & Refining	263,162	N.P.	....	.....	2¾	⅞	3	1	6	1½
36	31	50	33½	33½	33½	Eureka Pipe Line	50,000	$100	$1Q	5- 1-34	41¾	20	35	18	36	19
76¾	56½	11,400	69½	58⅛	68¾	Gulf Oil Corp.	4,538,101	$25	....	10- 1-31	62	24	44⅜	23	75½	25⅜
46⅜	33½	7,600	45½	42⅜	45	Humble Oil & Refining (new)	8,923,935	N.P.	25eQ	7- 1-34	105½	40	55	35⅝	72	44½
15¼	12⅝	13,400	15¼	14⅜	15¼	Imperial Oil of Canada	26,857,152	N.P.	25eSA†‡	6- 1-34	15⅞	6½	10⅞	6¼	18¼	7⅝
6⅞	3⅞	100	5	5	5	Indiana Pipe Line	300,000	$10	15eSA	5-15-34	8	3⅛	7½	2⅜	21⅛	5½
28½	19⅜	21,800	28½	25⅞	28⅜	International Petroleum	14,247,088	N.P.	56eSA†‡	6- 1-34	23½	8⅝	12¼	8	15½	7⅜
3⅜	2⅛	12,200	3¾	3⅜	3⅝	Louisiana Land & Exp.	3,000,000	N.P.	....	.....	2¼	⅛	2½	½	2	½
5⅞	4	200	4¼	3¾	3¾	Lion Oil Refining	270,000	N.P.	....	10-27-30	9½	1¼	3½	⅞	6¾	1½
8¾	4¾	1,400	6	5⅞	5⅞	Lone Star Gas	5,382,723	N.P.	16eQ§	3-31-34	11⅞	4¾	11	3⅝	29	5½
5½	4	1,400	5¼	4⅞	5⅛	Mountain Producers	1,682,182	$10	15eQ	7- 2-34	6½	2½	4⅜	2⅛	5⅞	2
18⅛	14	1,300	15⅞	15¼	15⅞	National Fuel Gas	3,810,183	N.P.	25eQ	4-16-34	20	10	14⅝	8	26½	9⅜
9½	7⅝	300	8	7⅜	8	National Transit	509,000	$12.50	40eSA	6-15-34	10	5½	10½	6	17½	5
2¼	1⅜	4,100	2¼	1⅞	2¼	New Bradford Oil	1,445,202	$5	10c	3-15-34	2⅛	½	⅞	¼	1½	½
2⅜	1	2,100	1⅜	1¼	1⅜	New Mexico and Arizona	1,000,000	$1	....	.....	1⅞	½	1¼	⅜	3	⅝
4¾	3	No sales	..	..	..	New York Transit	100,000	$5	15eSA	4-14-34	4⅞	3	9⅜	7½	14½	5⅞
7	4⅝	No sales	..	..	..	Northern Pipe Line	120,000	$10	25eSA	1- 2-34	6½	4¼	5½	3½	35½	20
2⅝	⅞	6,200	2	1½	1⅞	Pantapec Oil	1,608,700	N.P.	....	.....	3¾	⅛	⅝	⅛	2	⅜
3⅛	1¼	200	1⅞	1⅜	1⅞	Ryan Consolidated	296,931	N.P.	....	.....	4¼	⅝	2⅛	⅝	3	¾
7⅞	5⅜	800	6¾	6½	6¾	Salt Creek Producers	1,496,859	$10	20eQ	5- 1-34	9¼	3½	5½	2⅞	7⅝	2¾
26½	17½	3,900	26½	22¾	26½	South Penn Oil	1,200,000	$25	30eQ	6-30-34	22¼	11	16½	9⅝	23⅞	9¼
5¼	4	No sales	..	..	..	Southern Pipe Line	100,000	$10	10eSA	3- 1-34	6	2⅛	10	3¾	17	7
47	41	150	45	44½	45	Southwest Penna. Pipe Lines	35,000	$50	$1Q	7- 2-34	43	24½	37	27	42½	25
32¾	25	16,300	27½	26⅜	27¼	Standard Oil of Indiana	15,528,504	$25	25eQ	3-15-34	34	17	25⅛	13⅛	38½	13½
17⅝	14⅝	3,900	16¼	15¼	16¼	Standard Oil of Kentucky	2,606,983	$10	25eQ	6-15-34	19¼	8⅜	15⅞	8⅞	23⅝	12⅛
16⅝	12⅞	No sales	..	..	..	Standard Oil of Nebraska	190,822	$25	25eQ	6-20-34	20½	11	19	10¼	36½	16
27½	18¼	2,900	20¼	19⅛	20¼	Standard Oil of Ohio	753,740	$25	....	1- 3-33	41	15½	30⅛	15½	62½	23
2	1⅛	3,000	1½	1¼	1⅜	Sunray Oil	1,162,840	$5	....	4-15-31	1½	¼	⅝	⅛	5¼	⅛
11	4⅝	900	6⅞	6	6⅝	Texon Oil & Land	936,028	N.P.	15eQ	6-30-34	13¾	6¼	10½	4½	12⅞	2½

*Ex-dividend. †Plus extras. ‡Payable in Canadian funds. §Payable in preferred stock.

Note—In comparing highs and lows for the several years in the two tables, it will be necessary to take into consideration cases where there have been stock split-ups.

Gulf Coast Fields

(Continued from Page 71)

In Madison County, and along the Leon County line, W. C. Battaile and associates are reported to have taken a block of around 20,000 acres centering around the J. Woodruff, C. B. King, Daniel Parker, C. C. Miller, J. W. Gibson, J. Hodges and George Kirby Surveys for a well. The well is to be started by July 26.

Tomball Field

The Tomball Field in Harris County marked up four completions during the past week. Humble and Magnolia Petroleum Co.'s No. 3 Theo Krug on the western edge of the field was completed for 1,500,000 feet of gas through one-quarter inch choke at 5,569 feet. It showed a shut-in tubing and casing pressure of 2,000 pounds. Amerada & Rycade's No. 1 Ashley bottomed hole at 5,590 feet and was completed for 560 bbls. oil daily through one-quarter inch choke. Humble and Magnolia's No. 3 Bloechers bottomed hole at 5,579 feet and made 18 bbls. per hour through one-quarter inch choke. Humble and Magnolia's No. 1-B Schultze has been completed for 12 bbls. per hour through one-quarter inch choke at 5,606 feet. It topped sand at 5,596 feet.

In western Montgomery County and near the Grimes County line, Cooper & Smith's No. 1 Post has been abandoned as dry at 4,007 feet. On a drill stem test from 3,680-3,783 feet it showed 4 fourbles of mud and 36 fourbles of salt water with a show of gas through three-eighths inch choke in 23 minutes.

Mr. Iber and associates are reported to have taken around 2,000 to 2,500 acres of the Delta Land & Timber Co. in the A. Fleeming and Nettle Surveys for a well which is to be started within the next 60 days. Operators are also reported to have an option of an additional 2,500 acres at $1 per acre.

Liberty County

Just north of Hardin in Liberty County, Gulf Production Co. is reported to have recently taken around 2,000 acres centering around the J. Young, A. B. Hardin, Johnson & Thompson, and the Hugh B. Johnson Surveys. Humble Oil & Refining Co. is also reported to have taken around 1,000 acres in the area.

Geophysical Work

Geophysical work along the Texas and Louisiana Gulf Coast has shown no signs of abating during the recent months. The past week there were 72 geophysical crews working in the Gulf Coast. Thirty instrument crews were shooting the Louisiana coastal area and 42 crews were working on the Gulf Coast of Texas.

South Louisiana

On the southeast flank of the Jennings Field in Acadia Parish, Yount Lee Oil Co.'s No. 13 Houssierre Latrielle drilled through a salt overhang during the past week and has been completed flowing at the rate of 400 bbls. pipe line oil daily with a gas pressure of 700 pounds. Total depth is 7,354 feet.

On the southern part of the structure of the Welch Dome in Jefferson Davis Parish, Tide Water Oil Co.'s No. 1 Mrs. A. Bourgeois has been plugged back to 4,100 feet to straighten crooked hole. It was drilled to a total depth of 5,213 feet.

The Sulphur Field in Calcasieu Parish marked up two abandonments during the past week. Union Sulphur Co.'s No. 791 fee has been junked and abandoned after sticking drill stem at 3,453 feet. Union Sulphur Co.'s No. 790 fee has been abandoned as dry with total depth of 6,151 feet.

In St. Bernard Parish, Joe Danciger has staked location for No. 1 Delacrox Land Fur Co., 2,442 feet west and 660 feet north of the SE cor. of Section 127-14s-14e.

At Iowa in Jefferson Davis Parish, Shell Petroleum Corp. is reported to have recently taken 160 acres of the Coleman Le Blew land west of the Heyd tract. Shell formerly held this lease but turned it loose after drilling a dry hole on the land. Consideration for the renewal was reported at $30 per acre.

Canadian Fields

(Continued from Page 76)

River, LSD 11, Section 2-2-20w4, is waiting for additional pumping equipment to complete a definite production test. The well partially equipped delivered 232 bbls. in April, or a little less than 8 bbls. a day.

Ontario Drilling

In the Norfolk Field, Ontario, Prairie Oil & Gas Co.'s No. 2, between Mabee's Corners and Eden, was dry. No. 1 had a gas production around 162,000 feet a day.

In the Brooke shallow field, Lambton County, a test drilled by Gregory & Son for Bert Wilson of Sarnia in Lot 22, Concession 14, in the west end of the field, is reported to have finished with a pumping production of 2 bbls. an hour at shallow depth with a good gas flow. This producer has revived interest in the Brooke area.

California Fields

(Continued from Page 75)

Hellman and this new well was brought in flowing 1,050 bbls. per day from the third Callender zone at 5,883 feet. It is quite likely that this well will show a substantial increase in oil after it has been on production for another day or so. In the West Coyote Field the Standard completed No. 117 Murphy Coyote and this new well, which was brought in on a compressor doing 410 bbls. of 29.5 gravity oil per day, may possibly build up after it has cleaned itself out. This well, bottomed at 5,550 feet, was finished with a 6⅝-inch liner, including 140 feet of perforated. Standard has two other wells under way in this field and is rigging up No. 118 Murphy Coyote for early work.

Pacific Western Oil Co. is making good progress with No. 17 Rubel, a projected deep Miocene test, and this well may bear watching during the course of work as there is every indication that this deep drilling will be productive of satisfactory results. As a matter of fact if this well does not open up at least another productive zone, the Inglewood Field will prove the exception to the rule that fields located along the Newport-Beverly Fault zone all show at least four productive horizons. The only exception to this is at Potrero, where the faulted condition of subsurface strata has prevented commercial production. This field has shown the required number of zones but in every case there has not been a sufficient thickness of sand to show sustained production. Baldwin Oil Co. is rigging up its No. 9, which has been standing suspended for a long time, and will redrill and deepen the hole in search of deeper production.

Potrero

Wilshire Oil Co., in the Potrero Field of Los Angeles Basin, has reached a depth of 7,200 feet in No. 2 Potrero and is still making hole. This well is scheduled to be carried down to approximately 10,000 feet unless geological conditions prove unfavorable. It will be the deepest test to be drilled in the Potrero Field since its discovery, although several wells have been carried down below 8,000 feet. Santa Fe Springs has taken a new lease on life during the past 30 days and there are a number of reconditioning jobs under way in addition to the several new wells started during the past month. The Union Oil Co., which has some promising undeveloped acreage near the top of the structure, is rotating in two new wells and is making preparations to begin drilling operations in two more in the immediate future.

Continental Oil Co. has been experiencing considerable trouble with No. 32 Bixby in the Seal Beach Field, but expects to have the well on production in the near future. This new well was originally drilled to 6,582 feet, but has been subsequently plugged back to 6,190 feet from which depth the company will attempt to produce. In the Torrance Field of Los Angeles Basin, the General Petroleum Corp. has reconditioned No. 12 Carson after cleaning out the hole to bottom, 3,380 feet, and the well was returned to production pumping 45 bbls. per day. The Torrance Field has been inactive for a number of years due to the fact that it is rather well depleted.

New Wildcat

Union Oil Co. is making good progress since spudding in No. 1 Fullerton Heights, a wildcat which the company is drilling due west of the East Coyote Field of Los Angeles Basin, but it will be another 60 days before the bit reaches the depth at which the pay is expected. This well is a rank wildcat but at the same time has considerable merit as a very promising structure has been worked out. The Union has practically all of the promising surrounding acreage. The Union Oil Co. leased its land almost before anyone else woke up. As a result, none of the other major operators has any protective acreage although several of them had attempted on two occasions to lease the identical acreage secured by the Union company.

One or two landowners held out on the Union Oil Co. when it was leasing in Fullerton Heights and refused to lease their respective properties. This is especially interesting in view of a recent decision of Attorney General Webb, who ruled that the California Division of Oil and Gas cannot issue drilling permits for any well which is located on property comprising less than one full acre. The law, according to Attorney General Webb, is quite clear and applies to a small tract even though it may be entirely surrounded by other leases which are eligible for development. This is of particular interest because the few scattered leases which the Union failed to get are less than a full acre and the landowners are now sitting out on the end of a limb. The Union is still willing to accept their acreage in a community lease but will probably limit this concession to a short period of time. It is quite likely that this statute will be contested in court, but according to reputable lawyers it may stand every test providing that the landowners had every opportunity of joining with their neighbors in a community lease.

Mount Poso

Drilling operations in the Mount Poso Field of Kern County during the past few months have been running somewhat above normal and indications point to the possibility that development work will continue at about the present rate for the remainder of the current year. Some of the new work done during the past several months has been due to the obligation of major companies to comply with lease obligations. The Texas Co. added a new well to its list of producers in this field when No. 5 Vedder in Section 4-27-28 was brought in pumping 590 bbls. of relatively clean 15.9 gravity oil per day from 1,833 feet, after the hole had been finished with an 8⅝-inch oil string carrying perforations at 1,596-1,648 feet and at 1,722-1,832 feet. Union Oil Co. has staked several additional locations in this field and further work will be undertaken in the near future. The next completions expected in the Mount Poso Field include General Petroleum's No. 18 Glide and Modoc's No. 2 Johnson, both of which are in the pay.

The Standard Oil Co., according to field reports, almost had a wild gasser on its hands in the McKittrick Field, where the company is drilling a semi-wildcat in Section 15-30-22, and only prompt action of the crew prevented a premature blowout. This well, which is being drilled for the purpose of determining the possibility of commercial gas production north of the McKittrick Field, is relatively shallow. This location, by the way, appears to merit the drilling of a conclusive test. The Midway Peak Oil Co. is preparing to drill a shallow test in Section 10-32-24 in the Midway-Sunset Field of Kern County and spud is expected to be made within the next several days. This wildcat is being drilled for the purpose of determining the production possibilities of the immediate area where shallow production is expected. The pay is expected to be picked up above the 3,000-foot level and consequently the outcome of this test should be determined within 30 days after the hole has been spudded in.

Long Beach

Two reconditioning jobs were completed in the Long Beach Field during the present week and both wells showed commercial production. Plymouth Oil Co. redrilled No. 11 Signal to 4,895 feet and finished this well pumping 399 bbls. of of 28.6 gravity oil per day. The Apex Petroleum Co.'s No. 1 Brayton was recompleted pumping 296 bbls. of 26.2 gravity oil per day after the hole had been cleaned out to 5,024 feet. Drilling operations in the Long Beach Field have been slipping off during the past few months and it will not be long before there will be very little new work under way. Due to the large number of producing wells in this field it is quite likely, however, that reconditioning work will continue for several years as some wells will be deepened and others plugged back.

Kettleman Hills

Within the next 30 days, approximately 10 new wells should be completed in the North Dome of Kettleman Hills and consequently the potential daily production of this field should be substantially increased. The Kettleman North Dome Association has recorded most of its projected tests during the past month and it is now the Standard's turn to begin chalking up new wells. Based on a survey of incompleted drilling wells under way the Standard will quite likely do this very thing although Kenda still has several new wells nearing completion and will consequently break into the completion column at frequent intervals during the next 60 days.

Associated Oil Co. has just finished No. 4 Whepley and this well, which has been held up with mechanical trouble for several months, was brought in flowing 6,000 bbls. of 38 gravity oil per day. Associated's new well was bottomed at 8,581 feet and finished with 5-inch liner, including 550 feet of 300 mesh screen.

Central West Fields

(Continued from Page 73)

nenwirth farm, Section 22, Plain Township, is a gas well at 3,579 feet.

In Guernsey County, East Ohio Gas Co.'s test on the Gadd-Little farm, Section 1, Wheeling Township, produced 40 bbls. at a total depth of 3,687 feet. E. C. Quillan and others' No. 1 Quillan farm, Section 10, Wheeling Township, reported with an initial of 23 bbls. at 3,698 feet.

In Vinton County, William Beckley's No. 10 on his own farm, Section 3, Knox Township, produced but 1-bbl. initial at a depth of 1,013 feet.

In Geauga County, Brooks Johnson and others' No. 1 B. W. Eddy farm, Section 7, Chester Township, was a dry hole at 3,710 feet.

In Meigs County, Ohio Fuel Gas Co.'s No. 115,813 Jennie Hobs farm, Section 4, Rutland Township, is a gas well at 1,425 feet. Caywood and others are drilling No. 4 on the William D. Roush farm, Lots 30-36, Sutton Township.

ILLINOIS

In Lawrence County, Illinois, Ohio Oil Co. abandoned No. 1 Ella Cullison farm, SW Section 22, Bridgeport, also Nos. 7 and 12 J. E. Johnson farm, SE Section 32, and Nos. 12 and 46 on the J. T. Griggs farm, NE SE same section.

In Wabash County, Edrite Oil Co. abandoned No. 3 Ed Wright farm, Section 13, Wabash Township, Wabash County, and J. S. Young, Jr., reports a dry hole on the Mike Shaffer farm, Section 28, same township, at a depth of 1,285 feet.

INDIANA

No completions were reported from the

Indiana Fields. The only change reported is Knox Engineering Corp.'s No. 3 in the northwest corner of the Martha J. McCullough farm, in the SW NW Section 10, Barton Township, Gibson County, is drilling. Gib-Van Oil Co. is drilling No. 2 G. W. Shoultz farm, Section 18, Patoka Township.

KENTUCKY

The Kentucky Field is showing a real revival in operations. Fifteen completions were reported, more than at any time during the past two years.

In Ohio County Miles and others' No. 1 on the Bob Canary farm, in the Fordsville area, produced an initial of 40 bbls., and No. 2 is a rig. Hupp, Duff and others' No. 4 on the O. T. Burdette 30 acres in the Herbert Pool produced 25 bbls. Stewart H. Weirs' No. 1 on the Henry Hobbs farm, in the Newton Pool, produced 25 bbls. initial. Same company is starting No. 2 on Dick Wells farm, same pool. Cumberland Petroleum Co.'s test on the A. Rusher farm, in the Fordsville Pool, is a dry hole and No. 2 is starting. D. J. White's No. 2 on the G. M. Burdette 214 acres, in the Herbert Pool, is a dry hole. Messa Oil Co.'s No. 8 J. W. McDaniels farm, same pool, is also dry.

In Hancock County, Hupp, Duff and others' No. 2 Fred Crowe 64 acres is a duster. Same company's No. 1 on the Chancellor heirs farm, is a gas well. Same company's No. 1 on the Logan Newton 80 acres produced 40 bbls., and same company's No. 12 Elec Jackson farm also produced 40 bbls. initial. Same company is drilling No. 3 Dan Burke, and No. 11 on the Preston Matthews farm. Chester Oil Co.'s No. 2 J. W. Baughn farm, same county, produced 60 bbls. initial.

In Allen County, near Scottsville, Dan Ruble's test on the G. W. Welch farm, in the Mount Aeril Pool, was dry, as was Clyde Wheeler's test on the Jim Bates farm, in the Hardcastle Pool.

In Barren County, John Boyd's test on the Boyd farm produced 5 bbls. at a depth of 370 feet.

Kentucky Producing Corp. drilled a dry hole in No. 6 Boyd Stout farm, in Hancock County.

Wildcat Operations in Louisiana-Arkansas

(Continued from Page 69)

MOREHOUSE PARISH

James A. Noe's No. 1 Dalton, 3,445 ft. N, 805 ft. W of common cor. Sec. 41-21-5e ..... Set 6-in. 2,268 ft.
Zeiger & Bacon's No. 1 Crossett, 400 ft. N, 300 ft. W, SE cor. Sec. 41-22-4e ..... S.D. 2,525 ft.

NATCHITOCHES PARISH

Penn Sou. Pet. Co., Inc.'s No. 1 Chopin Lbr. Co., 275 ft. N and W, SE cor. NE SW Sec. 4-5n-8w ..... S.D. 3,500 ft.
Plummer & McDaniel's No. 1 Walmsley, SE SW Sec. 45-10n-8w ..... Set 10-in. 1,150 ft.; drlg. 2,185 ft.

OUACHITA PARISH

Ark.-La. P. L. Co.'s No. 8 Rea-Green, 2,730 ft. S, 1,750 ft. W, NE cor. Sec. 4-18-4e ..... Comp. 1,000,000 ft. gas 2,190 ft.
Ark.-La. P. L. Co.'s No. 8 McEnery, 1,420 ft. N, 1,700 ft. W, SE cor. Sec. 21-19-4e ..... Set 12½-in. 111 ft.; drlg. 574 ft.
Carbons Consolidated's No. 4 Cole, 662 ft. S, 1,969 ft. W, NE cor. Sec. 36-20-4e ..... Drlg. 1,516 ft.

RED RIVER PARISH

Kincaid & Kelly's No. 1 Ober, 315 ft. N, 257 ft. W, SE cor. NW SE Sec. 5-14-10 ..... Set 10-in. 84 ft.
A. D. Mytlier's No. 1 La. Delta Pecan Co., 1,700 ft. N, 160 ft. E, SW cor. Sec. 27-13-11 ..... Coring 857 ft.
Oynett et al's No. 1 Thomas, 330 ft. S and E, C Sec. 34-13-8 ..... S.D. for fuel 740 ft.

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SABINE PARISH

J. F. Anderson's No. 1 Burkett, 185 ft. N, 655 ft. E, SW cor. NW Sec. 10-9-13 ..... W.O.S.R. 1,993 ft.
J. W. Bettis et al's No. 1 Frost Lbr. Ind., 330 ft. S and W, NE cor. SW Sec. 15-9-13 ..... Rigging up.
R. B. Campbell et al's No. 1 Cook Land Co., 150 ft. N, 300 ft. W, SE cor. NW NW Sec. 35-10-13 ..... W.O. csg. 1,536 ft.
G. H. Collins' No. 1 Bellieu & Carter, 320 ft. S and W, NE cor. NW SW Sec. 21-9-13 ..... Set 10-in. 40 ft.; drlg. 900 ft.
De Generes et al's No. 3 Crawford, 330 ft. N and E, SW cor. NW NE Sec. 20-9-13 ..... Set 10-in. 45 ft.; set 6-in. 1,460 ft.
Earl P. Halliburton's No. 2 Barr, 330 ft. S, 990 ft. E, NW cor. Sec. 15-9-13 ..... P.B. to 1,995 ft.
Helena O. & G. Co.'s No. 6 Burkett, 330 ft. S and E, NW cor. NE Sec. 10-9-13 ..... Tested dry 1,989 ft.
Zan Lloyd's No. 1 Henderson, 330 ft. N and W, C Sec. 29-9-13 ..... W.O.S.R. 2,031 ft.
H. C. Maulding's No. 2 Alford, 330 ft. N and E, SW cor. NW NW Sec. 18-7-10 ..... S.D. 2,750 ft.
Dr. O. B. Hicks' No. 1 Neal, SE SW SE Sec. 18-9-12 ..... Set 10-in. 40 ft.
Parker et al's No. 1 Henderson, 330 ft. S and E, NW cor. SE NE Sec. 29-9-13 ..... Comp. pumping 10 bbls. 1,920 ft.
L. L. Posey's No. 3 Burkett, 330 ft. S and E, NW cor. NE NW Sec. 10-9-13 ..... W.O.S.R. 1,984 ft.
Preston & Stinron's No. 1 Slay, 660 ft. W, 330 ft. N, SE cor. NW SE ..... Testing 1,995 ft.
W. H. Rowe et al's No. 1 Craig, 330 ft. S and E of center Sec. 23-9-13 ..... S.D. 1,200 ft.
J. A. Stinson's No. 1 Whitney Corp., 330 ft. S and W, NE cor. Sec. 8-9-13 ..... W.O.S.R. 2,014 ft.
Stumpff & McFall's No. 1 Paul estate, Sec. 10-9-13 ..... Tested S.W.; S.O. 1,976 ft.
Windsor Oil Co.'s No. 2 Barr, 330 ft. N and E, SW cor. NW Sec. 15-9-13 ..... Location.

RAPIDES PARISH

Ben Banner's No. 1 Bentley Lbr. Co., 2,640 ft. E, NW cor. Sec. 11-4n-5w ..... Drlg. 2,150 ft.
Evans & Collingsworth's No. 1 Hickman, 330 ft. S and E, NW cor. Sec. 40-4-1e ..... S.D. 2,130 ft.

Arkansas

COLUMBIA COUNTY

O. F. Whittaker's No. 1 Hall, C SE NE Sec. 10-15-20 ..... Set 10-in. 103 ft.; drlg. 1,220 ft.

CONWAY COUNTY

Sou. Union Gas Co.'s No. 1 Feldman, C SW SW Sec. 6-5n-17w ..... S.D. for wtr. 2,865 ft.

HEMPSTEAD COUNTY

A. H. Bagnelle's No. 1 Trattner & Rhinehart, Sec. 3-13-26 ..... Drlg. 1,580 ft.

LAFAYETTE COUNTY

Douglas Lawn's No. 1 Camp, 330 ft. S and W, NE cor. SW SE Sec. 14-15-23 ..... Drlg. 1,630 ft.
Earl F. Fox's No. 1 Coleman Bros., 330 ft. N and W, SE cor. NW NE Sec. 36-16-25 ..... Rigging up.
George W. Harper's No. 2 Bodcaw, 150 ft. S, 950 ft. E NW cor. SW NW Sec. 16-15-22 ..... Dry and abd. 1,218 ft.
C. V. Lenz' No. 1 Foster, 330 ft. S, 150 ft. E, C Sec. 9-15-25 ..... Drlg. 2,710 ft.

LEE COUNTY

Ark.-La. P. L. Co.'s Mo. 1 McDonald, 1,500 ft. N, 370 ft. E, SW cor. Sec. 28-1n-4e ..... Rigging up.

MILLER COUNTY

Duluth-Ark. Oil Co.'s No. 2 Beck, 330 ft. S and E, NW cor. SE SW Sec. 34-15-26 ..... Comp. pumping 10 bbls. 2,811 ft.
Fitzwater et al's No. 1 Norson, SW cor. SE SW Sec. 20-15-27 ..... S.D. 3,177 ft.
King Oil Corp.'s No. 1 C. H. Schroder, 200 ft. N, 330 ft. E, SW cor. SW NE Sec. 34-14-28 ..... S.D. 2,000 ft.
W. F. Lacey's No. 1 Gibson, 330 ft. S and E, NW cor. SW NW Sec. 30-19-27 ..... Set 10-in. 216 ft.
C. E. Murdock's No. 1 E. L. Beck, 330 ft. N and E, SW cor. SE SE Sec. 33-15-26 ..... W.O.S.R. 2,929 ft.
Texarkana Oil Corp.'s No. 1 H. E. Beck, 330 ft. N and E, SW cor. SW SW Sec. 34-15-26 ..... W.O.S.R. 2,923 ft.
Lee Timberlake et al's No. 1 E. L. Beck, 150 ft. N and E, SW cor. NW SE Sec. 33-15-26 ..... Drlg. 2,100 ft.
J. K. Wadley's No. 1 Deckerman, 200 ft. N, 330 ft. E, SW cor. NW Sec. 24-17-27 ..... Drlg. 4,414 ft.
R. L. Young, Tr.'s No. 1 Patterson, SE cor. SE NE Sec. 5-19-28 ..... Set 6-in. 3,635 ft.; T.D. 3,655 ft.

OUACHITA COUNTY

L. L. McDonald's No. 1 J. A. Robertson, 200 ft. S and E, NW cor. NE NW Sec. 25-15-16 ..... W.O.S.R. 2,092 ft.
L. L. McDonalds' No. 1 Arnold & Doyle, 150 ft. N and W, SE cor. NE SW Sec. 23-15-16 ..... W.O.S.R. 2,131 ft.

UNION COUNTY

R. R. Henderson's No. 2 J. H. Ogden, 330 ft. S and E, NW cor. SW SE Sec. 32-18-14 ..... Dry and abd. 2,208 ft.
R. R. Henderson's No. 1 Vines, 330 ft. N and W, SE cor. SW SE Sec. 29-18-14 ..... P.B. to 2,161 ft.
Mrs. R. K. Jones et al's No. 1 J. Davis, 330 ft. N and W, SE cor. NW NW Sec. 28-16-14 ..... S.D. 2,362 ft.
McCreslenn Oil Co.'s No. 3 Atkins, 330 ft. S and W, NE cor. SW NE Sec. 2-18-13 ..... Drlg. 2,118 ft.
Tubal Pet. Co.'s No. 1 Gaddy, 340 ft. N and E, SW cor. SE NW Sec. 14-17-14 ..... S.D.; W.O. 3,416 ft.

Mississippi

FRANKLIN COUNTY

E. R. Ratcliff's No. 1 Banks, SE cor. SE Sec. 20-5n-2e ..... Coring 3,175 ft.

GREENE COUNTY

United Gas Public Service Co.'s No. 1 Davis, C NW Sec. 30-1n-5w ..... Coring 6,650 ft.

ISSAQUENA COUNTY

Pelican Oil & Gasoline Co.'s No. 1 Steel Bayou Corp., 400 ft. N, 350 ft. E, SW cor. NW Sec. 14-12n-8w ..... Set 10-in. 206 ft.; drlg. 1,850 ft.

SIMPSON COUNTY

Berry Corp.'s No. 2 R. T. Berry, Sec. 33-2n-4e ..... Set 10-in. 60 ft.; drlg. 950 ft.
Perkins & Dees' No. 1 Lee, 1,500 ft. E, 500 ft. N, SW cor. Sec. 33-15n-8w ..... Drlg. 75 ft.

WALTHALL COUNTY

Mutual O. & Gas Co.'s No. 1 Boyd, Sec. 24-2n-9e, SW cor. SW SE ..... Moving in rig.

WARREN COUNTY

Orbet Drlg. Co.'s No. 1 R. L. Parker, 300 ft. E. CWL, Sec. 14-14-1e ..... S.D. 3,169 ft.

Louisiana-Arkansas Proven Areas

North Louisiana

CADDO—RODESSA

Company, well, farm name, section and block—	Remarks:
R. W. Norton's No. 1-B J. B. French, 660 ft. S and E, NW cor., Sec. 34-23-16	Comp. 2,000,000 ft. gas 5,500 ft.
United Gas Pub. Ser. Co.'s No. 1 Deer, 1,320 ft. N and W, SE cor. Sec. 24-23-16	Coring 5,995 ft.

SABINE PARISH—ZWOLLE

Alexander & Cane's No. 1 Fogman, SE cor. N½ SW NE Sec. 18-7-11 ..... S.D. 800 ft.
Ivan A. Allen's No. 1 La. Long Leaf, 330 ft. N and W, SE cor. NW SE Sec. 12-7-11 ..... S.D. 750 ft.
Dyer et al's No. 1 McCollister, 330 ft. S and E, NW cor. SW NE Sec. 24-7-12 ..... S.D. 1,100 ft.
Foster & Hartman's No. 1 Bowman-Hicks, 330 ft. S and E, NW cor. NW NE Sec. 10-7-12 ..... Drlg. plug 2,416 ft.
E. D. Holcomb's No. 1 Porter, 330 ft. S, 330 ft. W, NE cor. SE Sec. 7-7-11 ..... Dry; W.O. 2,580 ft.
M. J. Kissick's No. 1 Sermon, 388 ft. N, 606 ft. E, SW cor. SW SE Sec. 11-4-13 ..... Set 10-in. 146 ft.

M. J. Kissick's No. 1 Barn, 350 ft. S and W, NE cor. SW SE Sec. 6-4-11 ..... Drlg. 3,450 ft.
Magnolia Pet. Co.'s No. 3 Gindratt, 330 ft. N, 330 ft. E, SW cor. SE Sec. 30-3-11 ..... Dry and abd. 2,485 ft.
H. C. Mauilding's No. 2 DeLatin, 330 ft. S and E, NW cor. NE SE Sec. 3-7-11 ..... Rigging up.
Monroe Prod. Co.'s No. 4 Sabine Lbr. Co., 330 ft. N and E, SW cor. SE NW Sec. 7-7-11 ..... Comp. pumping 100 bbls. 2,468 ft.
Geo. L. Pace's No. 5 Greer, 330 ft. S and E, NW cor. Sec. 32-8-11 ..... Testing 2,400 ft.
Geo. L. Pace's No. 1 Garner, 330 ft. N and W, SE cor. SW NE Sec. 15-7-11 ..... W.O.S.R. 2,591 ft.
Pelican Nat. Gas Co.'s No. 29 4-L Co., Sec. 29-8-11 ..... Tested dry; W.O. 2,660 ft.
Pelican Nat. Gas Co.'s No. 32 La. Long Leaf, 314 ft. S, 35 ft. W, NE cor. W½ NW Sec. 31-8-11 ..... Used acid 2,575 ft.
Service Drlg. & Royalty Co.'s No. 6 E. E. Smith, 670 ft. S, 1,079 ft. E, NW cor. NW SE Sec. 7-7-10 ..... Comp. pumping 100 bbls. 2,652 ft.
Tarver & Bauer's No. 1 Barthold, 330 ft. N and W, SE cor. SW SE Sec. 25-8-12 ..... Rigging up.
Texas Co.'s No. 1 Billbray, 330 ft. N and E, SW cor. NW NE Sec. 32-8-11 ..... Rigging up.
Tex-La-Ark Oil Co.'s No. 1 Pickering Lbr. Co., Sec. 3-3-12 ..... S.D. 1,050 ft.; repair boiler.
Texas Co.'s No. 7 Stille, 330 ft. S, 330 ft. E, NW cor. SW Sec. ..... Dry and abd. 2,625 ft.

Mississippi

HINDS COUNTY

Alexander & Weaver's No. 1 Simpson, Sec. 25-6n-1e ..... Comp. est. 40,000,000 ft. gas 2,416 ft.

East Texas (Border Counties)

CASS COUNTY

United Gas Public Service Co.'s No. 1 Walton, John Coleman Sur. ..... Set 13⅜-in. 411 ft.; fishing 3,574 ft.
R. K. Kamon et al's No. 1 Savage, Mary Patterson Sur. ..... Tested dry 3,815 ft.

HARRISON COUNTY

R. C. Payne et al's No. 1 Lowery, E. D. Spain Sur. ..... S.D. 4,003 ft.

PANOLA COUNTY

Acre & Rotunda's No. 1 Burnett Lbr. Co., J. H. Mallory Sur. ..... Reaming 2,057 ft.
Givens & Holloway's No. 1 Wooten Est., Winnie Mann Sur. ..... S.D. 750 ft.
R. W. Price's No. 1 Crawford, J. A. Williams Sur ..... Rigging up.

SHELBY COUNTY

Bush Oil Int.'s No. 1 Windham, W. M. Blackburn Sur ..... S.D. 3,366 ft.
C. E. Litchfield's No. 1 Windham, A. H. English Sur. ..... Set 10-in. 350 ft.; drlg. 2,500 ft.
Turner & Neil's No. 1 Pickering Lbr. Co., P. W. Harvey Sur. ..... Set 10-in. 65 ft.

Wildcat Operations in Kansas

(Continued from Page 68)

KINGMAN COUNTY

Kessler et al's No. 1 Bollinger, SW NW SW Sec. 12-28-5w ..... Drlg. 3,440 ft.
Stanolind-Amerada's No. 1 Holtje, NE SW Sec. 16-26-4w ..... Rig.

LYONS COUNTY

Arkman & Baker's No. 1-A Hind, NE NW Sec. 30-21-12 ..... Drlg. 1,075 ft.

McPHERSON COUNTY

Tom Palmer's No. 1 Nordling, SE SW Sec. 19-18-2w ..... Hunton 3,040-50 ft.; pumped 279 bbls. 24 hrs.; comp.
Continental Oil Co. et al's No. 1 Graber, NE NW Sec. 32-21-1w ..... Hunton 3,274-94 ft.; swabbed 300 bbls. 24 hrs.
Marlsen Oil and Goering Bros.' No. 1 Decker, NW cor. SE Sec. 20-18-1w ..... Set 12-in. csg. 1,400 ft.; drlg.

NEMAHA COUNTY

Partland & McKenna's No. 1 Sudbeck, SW NW NW Sec. 20-1-12 ..... Top granite wash 490 ft.; S.D.

OSAGE COUNTY

Jim Edwards' No. 1 Detrich, C NW SE Sec. 21-14-15 ..... Machine.

OSBORNE COUNTY

Carmen & Hershey's No. 1 Fritz, C NE NE Sec. 9-10-14w ..... Drlg. 700 ft.

RENO COUNTY

Atlantic Oil Prod. Co.'s No. 1 Phillips, C E½ NW NE Sec. 22-22-6w ..... Drlg. 3,908 ft.
L. H. Wentz' No. 1 Metcalf, SE NE SW Sec. 3-24-7w ..... Drlg. 2,298 ft.
Sinclair Prairie Oil Co.'s No. 1 Shepard, SE cor. NW Sec. 22-26-9w ..... Drlg. 3,319 ft.

RICE COUNTY

Aylward & Trees' No. 1 Belder, SW SE NE Sec. 27-20-7w ..... Drlg. 2,780 ft.
Continental, Empire and Shell's No. 1 Bennett, NW SE Sec. 25-18-8w ..... Siliceous lime 3,132-75 ft.; swbd. 940 bbls. 21 hrs.
Deitrick et al's No. 1 Fitzpatrick, C NE NE Sec. 30-21-8w ..... S.D. 1,505 ft.
Elwell et al's No. 1 Springer, NE NW Sec. 35-18-10w ..... S.D. 2,440 ft.
Langston et al's No. 1 Markle, NE SW Sec. 1-20-9w ..... Drlg. 1,720 ft.
Reserve Dev. Co.'s No. 1 Heinz, NE SW SE Sec. 8-18-10w ..... T.D. 3,269 ft.; wtr.; S.D.
Robertson et al's No. 1 Johnson, NW cor. SW Sec. 22-19-8w ..... Location.

ROOKS COUNTY

Ashby et al's No. 1 Doughty, C SW SW Sec. 15-5-19w ..... T.D. 900 ft.; U.R. 12-in. csg.
Phillips Pet. Co.'s No. 1 Dopita, C SW SW Sec. 31-8-17w ..... Re-acidized.

RUSH COUNTY

Central States L. & P. Co.'s No. 1 Basgall, SE cor. Sec. 10-17-16w ..... Location.

RUSSELL COUNTY

C. L. Price et al's No. 1 Bender-B, NW SE Sec. 10-16-13w ..... Material.

SEDGWICK COUNTY

D. Lauck's No. 1 Gillespie, NE SE SW Sec. 6-28-1w ..... Fishing 405 ft.
Sovereign Oil Co.'s No. 1 Nichols, C NW SE Sec. 20-25-1w ..... Drlg. 1,623 ft.
Trees Oil, Derby Oil et al's No. 1 McMinn, SW NE Sec. 36-26-1e ..... Drlg. 1,075 ft.

STAFFORD COUNTY

Stanolind O. & G. Co.'s No. 1 Denker, 693 ft. from N line, 330 ft. from W line, SW Sec. 10-22-12w ..... Drlg. 1,620 ft.

SUMNER COUNTY

Morgan & Flynn's No. 1 Mercer, NW NE NW Sec. 36-32-1w ..... Drlg. 2,105 ft.

TREGO COUNTY

Alma Pet. Co. et al's No. 1 Rhodes estate, SW SW Sec. 14-11-23w ..... Set 6-in. csg. 3,700 ft.
Central Commercial's No. 2 King, C SE SW NE ..... Drlg. out cave; T.D. 4,015 ft.

WOODSON COUNTY

Sheedy et al's No. 1 Hassenpflug, NW cor. NE Sec. 34-25-14 ..... Rigging up.
Sheedy et al's No. 1 Street, NW SE NW Sec. 28-24-14 ..... Dry and abd. 1,835 ft.
Schwartz et al's No. 1 Collins, SW NW NE Sec. 30-23-14 ..... S.D. 200 ft.

Gulf Coast Fields and Wildcats

(Continued from Page 71)

STRATTON RIDGE—BRAZORIA COUNTY

Amerada Pet. Corp.'s No. 5 Seaborn, Austin-Williams Sur., 600 ft. E of No. 3 and 329 ft. S at R/A ..... Stuck D.S. 7,202 ft.; P.B. to 5,500 ft.; W.O.C.

WEST COLUMBIA—BRAZORIA COUNTY

Miramar Oil Corp.'s No. 3 Hogg, 100 ft. N of No. 2 and 100 ft. from W line of lease ..... T.D. 5,360 ft.; P.B. 2,400 ft.; W.O.C.

BARBERS HILL—CHAMBERS COUNTY

Mills Bennett Prod. Co.'s No. 3-B Gulf fee, 25 ft. out of SE cor. of lease ..... Top salt 1,402 ft.; drlg. salt 1,811 ft.
Mills Bennett Prod. Co.'s No. 9-B Wilburn, Henry Griffith league, 737 ft. E W line and 190 ft. S N line of lease ..... Derrick.
Humble O. & R. Co.'s No. 6-B Kirby, 593 ft. N of S line, 388 ft. E of W line of lease, or 125 ft. N and 288 ft. W of No. 5 ..... Set surface csg.
Moody Corp.'s No. 5-A E. W. Barber, 100 ft. E of W line and 70 ft. N of S line of lease ..... T.D. 1,334 ft.; W.O.C.
Moody Corp.'s No. 6-A Barber, 75 ft. W or E line and 400 ft. N of S line of lease ..... Rigging up.
Sinclair Prairie Oil Co.'s No. 17-A Wilburn, 150 ft. W of No. 18 ..... Top salt 1,380 ft.; T.D. 4,251 ft.; comp. 720 bbls., ¾-in. choke, 260 lbs.
Sinclair Prairie Oil Co.'s No. 18-A Wilburn, Henry Griffith league, 150 ft. W of No. 17-A and 14 ft. S N line of lease ..... Derrick.
Sun Oil Co.'s No. 9 Chambers Co., 181 ft. W of No. 8 and 50 ft. from N line of lease ..... Drlg. salt 1,902 ft.
Sun Oil Co.'s No. 3 Higgins, 50 ft. E line and direct offset to McAlbert's No. 2 Higgins in Wm. Hodges Sur. ..... T.D. 3,018 ft.; milling on junk.
Sun Oil Co.'s No. 5 Higgins, 125 ft. W of No. 4 ..... Set 13⅜-in. csg. at 1,392 ft.; drlg. salt 1,765 ft.
Sun Oil Co.'s No. 16 Wilburn fee, 120 ft. W of No. 15 and 40 ft. from N line of 20-acre tract in William Hodges Sur. ..... Drlg. hard sand and shale 4,436 ft.
Texas Co.'s No. 8 Wilburn, 25 ft. W of No. 5 and 50 ft. N of S line in the Henry Griffith League ..... Drlg. hard shale and lime 5,696 ft.
Texas Gulf Prod. Co.'s No. 2 Barber, 514 ft. W, 41 ft. S of NE cor. of lease, Henry Griffith League ..... Top lime 4,717 ft.; drlg. hard lime 4,777 ft.
Texas Gulf Prod. Co.'s No. 8 A. E. Barber, 400 ft. S of N line and 50 ft. E of W line of lease ..... Drlg. rock 3,612 ft.
Texas Gulf Prod. Co.'s No. 4 Wilburn, Wm. Hodges Sur., 330 ft. N of S line, 50 ft. W of E line ..... T.D. sand and shale 4,991 ft.; washing.
Yount Lee Oil Co.'s No. 24 Chambers County, 400 ft. W of No. 23 in line with No. 21 ..... Drlg. salt 1,585 ft.; T.S. 1,456 ft.
Yount Lee Oil Co.'s No. 25 Chambers County, 75 ft. S. 50 ft. W of NE cor. of lease ..... Rigging up.
Yount Lee Oil Co.'s No. 8 Phillips, Wm. Hodges Sur. ..... Drlg. salt 2,706 ft.

BIG CREEK—FORT BEND COUNTY

Gulf Prod. Co.'s No. 63 Davis, 2,270 ft. SW of No. 59 and in line with No. 21 and No. 59 in M. Young Sur. ..... T.D. 3,984 ft.; comp. 370 bbls. daily, ¾-in. choke.

RABBS RIDGE—FORT BEND COUNTY

Humble O. & R. Co.'s No. 11 T. R. Booth, 281 ft. N, 15 ft. W of NE cor. of A. Myers tract No. 1, 180 acres in J. Rabb Sur. ..... Drlg. sand 3,066 ft.
Humble O. & R. Co.'s No. 26-A Lockwood & Sharp, 755 ft. N and 14 ft. W of No. 26-B, in J. Rabb Sur. ..... Derrick.
Humble O. & R. Co.'s No. 27-A Lockwood & Sharp, 1,149 ft. W of No. 26-A and 755 ft. W of No. 27-B in J. Rabb Sur. ..... Drlg. shale 4,642 ft.
Humble-Gulf's No. 28-A Lockwood & Sharp, 379 ft. from S line and 2,872 ft. from E line of "A" lease in J. Rabb Sur. ..... Location.
Naylor's No. 4 S. B. Gehr, 1,260 ft. from W line and 330 ft. from S line of lease in Samuel Kennedy Sur. ..... T.D. 5,406 ft.; set screen; would n't flow; installing pumping unit.

LONG POINT—FORT BEND COUNTY

Oleson et al's No. 1 McFarland ..... T.D. 1,003 ft.; S.D.

ORCHARD—FORT BEND COUNTY

Gulf Prod. Co.'s No. 39 Moore ..... T.D. 3,915 ft.; preparing to set screen.

HIGH ISLAND—GALVESTON COUNTY

D.E.M. Oil Co.'s No. 2 Great Western ..... Deepened from 152 ft. to 173 ft.; cmtd. 6-in. csg.
Yount Lee Oil Co.'s No. 4 Broussary & Orme, M. Dunman Sur., 129 ft. SW of No. 3 ..... Top salt 4,565 ft.; T.D. shale and pyrite 5,358 ft.; drlg. hard sand 4,156 ft.
Yount Lee Oil Co.'s No. 24 Cade, 300 ft. W of No. 22, at right angles to a line through 21, 22 and 23, in the N. Fitzsimmons Sur. ..... Drlg. sand 5,929 ft.
Yount Lee Oil Co.'s No. 41 Cade, Fitzsimmons Sur. ..... Rigging up.
Yount Lee Oil Co.'s No. 40 Cade, 430 ft. NW of No. 2-B, 260 ft. from E line of lease and in line with No. 39 and No. 2-B, Fitzsimmons Sur. ..... Drlg. hard sand 3,757 ft.
Yount Lee Oil Co.'s No. 2 Mathis, M. Dunman Sur., direct offset No. 1 Spencer ..... Base salt 3,760 ft.; T.D. 3,846 ft.; preparing to drill plug.
Yount Lee Oil Co.'s No. 22 Smith ..... Drlg. gumbo 1,220 ft.
Yount Lee Oil Co.'s No. 24 Smith ..... Drlg. sand 5,929 ft.
Yount Lee Oil Co.'s No. 42 Cade, N. Fitzsimmons Sur., half way between Nos. 26 and 28 and 150 ft. E at right angles ..... Derrick.

ARRIOLA—HARDIN COUNTY

Republic-Houston's No. 2-X Arriola fee ..... T.D. 4,573 ft.; P.B. to 2,300 ft.; drlg. shale 4,785 ft.

BATSON—HARDIN COUNTY

Danciger O. & R. Co.'s No. 2 Hooks, W. Donoho Sur., 330 ft. E of CWL, Blk. 24 ..... T.D. 4,795 ft.; flowed salt water; P.B. 4,555 ft.; standing.

SARATOGA—HARDIN COUNTY

Rio Brava Oil Co.'s No. 109 Jordit ..... T.D. 1,420 ft.; comp. 40 bbls. daily.
Rio Bravo Oil Co.'s No. 110 Jordit, 200 ft. due S No. 109 ..... Derrick.
Seismo Oil Co.'s No. 1 Casewell, 940 ft. S of NW cor. and 600 ft. from E line, B.B.B.&C. Sur. ..... T.D. 3,212 ft.; shut down.
Sinclair Oil Co.'s No. 1 Teel Estate, 3,685 ft. W of E line of league, 4,285 ft. S of N line of league, or 1,032 ft. S of N line and 717 ft. W of E line of 134-A. tract ..... T.D. 1,100 ft.; W.O.C.
Skinner Oil Co.'s No. 3 Sessler ..... Drlg. cap rock 2,185 ft.; top cap rock 2,150 ft.

SOUR LAKE—HARDIN COUNTY

Alpha Pet. Co.'s No. 1 J. M. Weiss, 122 ft. S of Steinberger's No. 1 Weiss in Blk. 25 ..... Drlg. shale 1,800 ft.
Humble O. & R. Co.'s No. 1 Kirby et al, 140 ft. E W line and 300 ft. S N line of old Gulf 170-acre tract, S. Jackson Sur. ..... Derrick.
Parr et al's No. 1 Benard, in W.C.R.R. Sur. No. 69 (west edge) ..... T.D. 7,061 ft.; P.B. 4,800 ft.; swabbing very little oil.
Steinberger Pet. Co.'s No. 1 Weiss, 150 ft. W of Parr No. 1 and 50 ft. out of SE cor. of Blk. 28, E. B. Williams Sur. ..... Location.
Texas Co.'s No. 308 fee, 375 ft. S, 110 ft. E of No. 299, in Stephen Jackson League ..... Rigging up.
Yount Lee Oil Co.'s No. 6 Lynn, 250 ft. from W line and 200 ft. from N line of 43-acre tract in Sour Lake Oil Co. Sub. ..... Drlg. salt 4,346 ft.

HANKAMER—LIBERTY COUNTY

Miramar Oil Corp.'s No. 2 Crowe & Jacobs, H.&T.C. Sur. No. 21 ..... Spudded.

Miramar Oil Corp.'s No. 1 Crowe & Jacobs, H.&T.C. Sur. No. 21, 950 ft. W E line and 110 ft. N S line 300-acre tract ..... T.D. 4,808 ft.; rigging up to deepen.

GOOSE CREEK—HARRIS COUNTY

Edwards Drlg. Co.'s No. 1 Matthews, 40 ft. from S line and 37 ft. from W line of 1-acre tract in Wm. Scott Sur. No. 67 ..... T.D. 4,015 ft.; comp. 175 b' ls. day.

Gulf Prod. Co.'s No. 13 St. Land Prod., 39 ft. from E line or 89.4 ft. W of Sun Oil Co.'s No. 1 McFarland, Wm. Scott Sur. No. 67 ..... T.D. 4,680 ft.; P.B. 4,630 ft. to kill gas; perforated 7-in. csg. 4,000-30 ft.; flowed oil, gas and water; breaking down 4-in. drill pipe.

Gulf Prod. Co.'s No. 18-A Tabb-fee, 217 ft. S of No. 17-A and C of tract in Wm. Scott Sur. ..... Drlg. shale and lime 3,565 ft.

Hoffner & Moore's No. 1 A. A. Wright, 50 ft. N and 50 ft. E of SW cor. of Blk. 7, Wm. Scott Sur., Abst. No. 66 ..... T.D. 5,221 ft., shale; standing.

Humble O. & R. Co.'s No. 80 Simms-Smith ..... Bldg. derrick.

Humble O. & R. Co.'s No. 28 Sweet, 13 ft. W of SE cor. of Scott 2½-acre tract and 53 ft. from N line of lease, Wm. Scott Sur. No. 67 ..... Location.

Jay Simmons' No. 1 Dannebaum, 45 ft. from S and 50 ft. from E lines of lease in W. Scott Labor Sur. ... Derrick.

Jay Simmon's No. 1 Kerwin Mitchell, SE cor. of 6-acre tract ..... D.S. test 4,698-4,760 ft.; 12 min.; 1,050 ft. oil, S.W. and gas; drlg. 5,300 ft.

Thomas Drlg. Co.'s No. 1 Jones ..... Drlg. shale 2,314 ft.

Wilhite's No. 1 Gillette ..... T.D. 2,809 ft.; preparing to pump.

Wilhite's No. 1 Isenhour ..... Rigging up.

Wilhite's No. 2 Gillette, 100 ft. SW from N line of SW Hoskins tract in Lot 1 and 50 ft. NW from W bank of stream, Wm. Scott Sur. No. 66 ..... Derrick.

HUMBLE—HARRIS COUNTY

Rio Bravo Oil Corp.'s No. 8 fee, 250 ft. E, 100 ft. S of No. 2 fee ..... Set and cmtd. 7-in. csg. at 3,874 ft.; T.D. 3,883 ft.

Texas Co.'s No. 47 Stevenson, J. B. Stevenson Sur., 859 ft. E, 457 ft. S of NW cor., Lot 1-A ..... T.D. 5,338 ft.; sidetracking, salt 3,513 ft.

PIERCE JUNCTION—HARRIS COUNTY

Gulf Prod. Co.'s No. 10 H. C. Cain, 399 ft. S and 290 ft. E of NW cor. of lease and 217 ft. N of No. 9, 160-acre tract in J. Hamilton Sur. No. 879 ..... Location.

Rio Bravo Oil Corp.'s No. 9-A Settegast, 1,575 ft. N line, 350 ft. E line NE cor. "A" lease, J. A. Kopman Sur... T.D. 4,510 ft.; rigging up to work over; standing.

Rio Bravo Oil Corp.'s No. 12-A Settegast, 1,410 ft. N line, 650 ft. E line, J. A. Kopman Sur. ..... Drlg. shale and lime 4,982 ft.

Rio Bravo Oil Co.'s No. 24-A Settegast, J. Kopman Sur. No. 44, 1,000 ft. S, 200 ft. W of NE cor. of "A" lease.. Coring sandy shale 4,713 ft.

TOMBALL—HARRIS COUNTY

Amerada Pet.'s No. 1 Metzler, 318 ft. from S line and 466 ft. E line of lease in J. House Sur. ..... Rigging up.

Amerada-Rycade's No. 1 Ashley, 500 ft. E and 466 ft. S of Ashley tract in Joseph House Sur. ..... T.D. 5,590 ft.; comp. 560 bbls. day, ¼-in. choke.

Humble & Magnolia's No. 3 Bloecher, 984 ft. from N line and 663 ft. from W line of lease, J. Hooper Sur. No. A-375 ..... T.D. 5,579 ft.; comp. 18 bbls. hr., ¼-in. choke.

Humble-Magnolia's No. 2 C. F. W. Hendricks, 966 ft. S of N line and 466 ft. W of E line of 96-A. tract in Wm. Heard Sur. ..... Derrick.

Humble O. & R. Co.'s No. 1-B J. F. W. Kobs, 466 ft. from S line and 405 ft. E. of W line of tract, J. Edwards Sur. ..... Rigging up.

Humble O. & R. Co.'s No. 3-B Kobs, 2,182 ft. S of N line, 369 ft. W of E line of lease in J. H. Edwards Sur. ..... Drlg. shale 5,440 ft.

Humble-Magnolia's No. 3 Theo. Krug, 6,360 ft. N of most southerly S line and 235 ft. W of W line of Scherer 112-acre tract in J. H. Edward Sur. No. 20.. T.D. 5,563 ft.; comp. 1,500,000 ft. gas, ¼-in. choke, T.P. 1,100 lbs.

Humble-Magnolia's No. 1 Krug, 600 ft. N and 187 ft. E from SW cor. of J. F. W. Kobs 30.6-acre tract in J. H. Edwards Sur. ..... Location.

Humble-Magnolia's No. 2 Krug, 466 ft. from E line of lease and 800 ft. S of S line of Sherer 112-acre tract in J. H. Edwards Sur. ..... Location.

Humble and Magnolia Pet. Co.'s No. 2 B. J. Petrick, 700 ft. S of N line, 1,171 ft. W of E line of lease in J. M. Hooper Sur. No. A-372 ..... Derrick.

Humble & Magnolia's No. 3 Rudel-Oster, 150 ft. S of Amerada & Stanolind's No. 2 Fletcher, half way between E and W lines of 50-acre tract in J. House Sur. No. 34 ..... Rigging up.

Humble-Magnolia's No. 1-B Schultze, 466 ft. from W line and 3,276 ft. from S line of tract in J. H. Edwards Sur. No. 20 ..... T.D. 5,606 ft.; comp. 12 bbls. hr., ¼-in. choke.

Humble O. & R. Co.'s No. 1 Werner ..... Drlg. shale 3,251 ft.

J. E. Mabee's No. 1 W. W. Baker, 440 ft. S of C of N line of 80-acre lease in J. House Sur. ..... Rigging up.

Sun and Humble O. & R. Co.'s No. 1 Mc.zler, 34 ft. N and E of NE cor. of 2-acre graveyard in 90-acre lease in C. N. Pillot Sur. No. 632 ..... Location.

Texas Co.'s No. 2 Scherer (W. V. Bowles), 2,150 ft. S and 466 ft. W of NE cor. of lease in J. House Sur... Elev. 212 ft.; T.D. 5,655 ft.; completed as gasser; killed well and shut in.

ESPERSON—LIBERTY COUNTY

Cranfill & Reynolds' No. 4 Moores Bluff, 400 ft. S of No. 3 and 534 ft. from E line of tract in Duncan Sur.. T.D. 2,306 ft.; set screen 2,302 ft.

General Crude Oil Co.'s No. 3 Davis, 400 ft. N of No. 2, Joseph Kokernut Sur. ..... Location.

General Crude Oil Co.'s No. 4 Davis, 400 ft. N of No. 3, Joseph Kokernut Sur. ..... Location.

General Crude Oil Co.'s No. 12 Moore's Bluff, 2,100 ft. S of N line and 2,932 ft. W of E line of survey and tract, Moore's Bluff lease ..... Location.

General Crude Oil Co.'s No. 8 Davis, 660 ft. from S and 1,000 ft. from E line of lease in D. Kokernut Sur.... T.D. 2,379 ft.; reaming.

HULL—LIBERTY COUNTY

Eclipse's No. 4 Barrow ..... Preparing to work over.

Gulf Prod. Co.'s No. 101 Phoenix, E. G. Devore Sur. ..... Drlg. sticky shale 4,195 ft.

Gulf Prod. Co.'s No. 102 Phoenix, E. G. Devore Sur. ..... Drlg. sticky shale 3,002 ft.

Houston Prod. Co.'s No 2 Orgain, 300 ft. E of No. 1 ..... Rigging up to deepen.

Mirimar Oil Co.'s No. 10-A Phoenix, 250 ft. E of No. 4 and 100 ft. from N line of lease in J. Devore Sur. ... T.D. 4,474 ft.; P.B. 4,374 ft.; cmtd. packer on bottom.

Mirimar Oil Corp.'s No. 4-B Phoenix, 200 ft. E of No. 1 and 50 ft. from N line of lease in J. Devore Sur. ... Drlg. shale 6,490 ft.

Republic Prod. Co.'s No. 152 Dolbear, mid-way between Nos. 59 and 135, in the J. Devore Sur. ..... T.D. 2,211 ft.; putting on pump.

Republic Prod. Co.'s No. 153 Dolbear, 400 ft. N and 45 deg. E from No. 151, in the J. Devore Sur. .... Drlg. shale and sand 1,578 ft.

Sun Oil Co.'s No. 7-A Carr, 200 ft. W of E line and 277f t. S of N line of lease..... Drlg. shale and lime 1,329 ft.

Texas Co.'s No. 7 Barrow fee, 458 ft. S and 350 ft. W of NE cor. of tract in J. Devore league ..... Drlg. hard shale and boulders 3,350 ft.

LIBERTY COUNTY

Mrs. I. M. Lemon Oil Co.'s No. 1 Richardson, 120 ft. E of Gulf & Humble's No. 1 Carter, in M. G. White Sur. ..... T.D. 3,882 ft.; rerun tubing; standing.

MARKHAM—MATAGORDA COUNTY

Hamil and Powers' No. 3 Myers, 150 ft. from N, 225 ft. NW of No. 1, in Wm. Hadden Sur. ..... Drlg. gumbo 300 ft.

CONROE—MONTGOMERY COUNTY

Alpha Pet. Co.'s No. 3-B Keystone Mills ..... T.D. 5,040 ft.; W.O.C.

American Liberty Oil Co.'s No. 2 Allen ..... Rigging up.

Gulf Coast Drlg. & Prod. Co.'s No. 25 Keystone Mills.. Drlg. plug 4,960 ft.

Gulf Coast Drlg. & Prod. Co.'s No. 26 Keystone Mills.. Drlg. 4,921 ft.

Humble O. & R. Co.'s No. 24 Keystone Mills ..... T.D. 5,127 ft.; comp. 85 bbls. hr., ½-in. choke.

Humble O. & R. Co.'s No. 29 Keystone Mills ..... T.D. 5,124 ft.; comp. 92 bbls. hr., ½-in. choke.

Humble O. & R. Co.'s No. 6-D Keystone Mills ..... T.D. 5,129 ft.; comp. 85 bbls. hr., ½-in. choke.

Humble O. & R. Co.'s No. 52 Moore ..... T.D. 5,126 ft.; W.O.C.

Humble O. & R. Co.'s No. 65-A South Texas Dev. Co. ... Drlg. shale 5,001 ft.

Humble O. & R. Co.'s No. 9-B South Texas Dev. Co. ... Drlg. shale 5,086 ft.

Humble O. & R. Co.'s No. 5 B. E. Jones ..... Drlg. shale 3,935 ft.

Humble O. & R. Co.'s No. 28 Keystone Mills ..... Drlg. shale 3,079 ft.

Humble O. & R. Co.'s No. 7-D Keystone Mills ..... Drlg. shale 1,943 ft.

Houston-Tide Water Oil Co.'s No. 8 Cartwright, 1,263 ft. from S line and 2,034 ft. from W line of lease in John Davis Sur. ..... T.D. 5,175 ft.; comp. 20 bbls. hr., ¼-in. choke.

Houston-Tidewater Oil Co.'s No. 10 Hammond, Stewart Sur. ..... Drlg. 469 ft.

Pine Tree Oil Co.'s No. 1 South Texas ..... Shale 5,182 ft.; W.O.C.

Sun Oil Co.'s No. 13 Keystone Mills, 704 ft. E from No. 17 well, thence S 282 ft. in A. Steele Sur. ..... T.D. 5,129 ft.; W.O.C.

PORT NECHES—ORANGE COUNTY

Texas Co.'s No. 2 Orange Natl. Bank, Jacob Beaumont Sur., 1,538 ft. W and 200 ft. S of NE cor. of lease .. Drlg. shale 7,155 ft.

Texas Co.'s No. 2-B Polk, 695 ft. N, 150 ft. S of NE cor. of N. Jacob Beaumont Sur. ..... T.D. 6,708 ft.; pulling pipe.

LIVINGSTON—POLK COUNTY

Gem Oil Co.'s No. 5 Davis & Holmes, 1,029 ft. from SE line and 328 ft. SW line of 157-acre lease, A. Viesca Sur. ..... Drlg. sticky shale 1,425 ft.

H. B. Owenby's No. 1 Duff, 78 ft. N of S line, 656 ft. W of E line of lease in A.Viesca Sur. ..... Coring sand 4,350 ft.

Werby Pet. Co.'s No. 1 Whittiforth, between Livingston and Sunshine Area ..... T.D. 4,580 ft.; abnd.

GRETA—REFUGIO COUNTY

Atlantic & Stanolind's No. 3-G J. M. O'Brien, Winfield Sur. ..... Coring 4,381 ft.

Atlantic & Stanolind's No. 6-A J. J. O'Brien, Ximines Sur. ..... Drlg. hard lime 4,009 ft.

Floboots Oil Co.'s No. 2-D J. M. O'Brien, E. H. Winfield Sur., 466 ft. S N line and midway E and W lines, Blk. 12 ..... Moving in rig.

Floboots Oil Co.'s No. 2-E J. M. O'Brien, E. H. Winfield Sur., 466 ft. S N line and midway E and W lines, Blk. 10 ..... Drlg. sand 293 ft.

Floboots Oil Co.'s No. 2-F O'Brien, Peoples Sur., 466 ft. S N line and midway E and W lines, Blk. 8 ..... Moving in rig.

Floboots Oil Corp.'s No. 1 M. C. Bauer, 320 ft. N line, 1,724 ft from W line, J. M. Ximines Sur. ..... T.D. 3,487 ft.; flowing gas and S.W.; T.P. 325 lbs., C.P. 650 lbs.

Floboots Oil Corp.'s No. 2-C J. M. O'Brien, 466 ft. from S and E lines of Block 15, Smith Subd., Winfield Sur. ..... T.D. 1,311 ft.; W.O.C.

Floboots Oil Co.'s No. 4-C J. M. O'Brien, 503 ft. from E line and 466 ft. from S line of Blk. 8, Peoples Sur... W.O.C.; T. D. 4,384 ft.

Hewitt & Dougherty's No. 1 Lambert, 466 ft. SW line and 466 ft. W line of Harper Sur., Blk. 18 ..... Drlg. lime 3,162 ft.

Hewitt & Dougherty's No. 4 Lambert, 467 ft. from N line and 507 ft. from W line of Blk. 5, Hardwick Sur. ..... T.D. 4,386 ft.; comp. 400 bbls. day, ½-in. choke, 210 lbs. pressure.

Houston Oil Co.'s No. 15 Rooke, 160 ft. S along E line along NE cor., 150 ft. W at right angles..... T.D. 760 ft.; W.O.C.

Humble O. & R. Co.'s No. 5 J. F. B. Heard in Peopes Sur. ..... Drlg. shale 4,065 ft.

Humble O. & R. Co.'s No. 6 J. F. B. Heard ..... Drlg. shale 4,063 ft.

Stanolind Oil & Gas Co.'s No. 6-B J. M. O'Brien, Peoples Sur. ..... Drlg. shale 2,770 ft.

Stanolind Oil & Gas Co.'s No. 3-A J. M. O'Brien, Peoples Sur., begin at NE cor. of "A" lease, thence W along N line 1,503 ft., thence S at right angles 466 ft., S offset to No. 4-B ..... S.D. 4,384 ft.

Stanolind Oil & Gas Co.'s No. 4 O'Connor, 466 ft. from W and S lines of 100-acre lease in Crunk Sur. ..... T.D. 4,385 ft.; testing.

United Prod. Co.'s No. 15 Fox, 330 ft. W of No. 2-A in Wm. Hews and L. Brown Sur. ..... T.D. 5,940 ft.; cutting and pulling drill stem 5,747 ft.

United Prod. Co.'s No. 14 W. J. Fox et al, 466 ft. from N line and 1,060 ft. W of No. 11 on 848-acre tract in Wm. Hews and L. Brown Sur. ..... Drlg. hard sand 5,560 ft.

United Prod. Co.'s No. 3 Lambert ..... T.D. 3,520 ft.; comp. 8 bbls. hr., ¼-in. choke, T.P. 75 lbs., C.P. 175 lbs.

United Prod. Co.'s No. 8 Lambert ..... Drlg. sand 1,387 ft.; 10-in. csg. at 1,221 f..

CLAY CREEK—WASHINGTON COUNTY

Sun Oil Co.'s No. 3 Schermer, N. Clay Sur., 330 ft. NW, 330 ft. SW line of lease ..... Coring sand and sandy shale 4,411 ft.

Sun Oil Co.'s No. 5 Schlettman ..... Drlg. shale 857 ft.

BOLING FIELD—WHARTON COUNTY

Imperator Oil Co.'s No. 1 S. T. Taylor, 993 ft. SW and 183 ft. SE from N cor. of old Vacuum 50-acre lease and offset Texas' No. 12 Taylor in S. F. Austin Sur... T.D. 3,067 ft.; stuck drill stem; to shoot and abandon.

SOUTH LOUISIANA FIELDS

BLACK BAYOU—CAMERON PARISH

Shell Pet. Corp.'s No. 3 State ..... Coring sand 4,913 ft.

BOSCO—ACADIA AND ST. LANDRY PARISHES

Humble O. & R. Co.'s No. 1 Joseph Berb, located on 100-acre tract lease in Section 21-8s-3e, about a mile and a half NW of the producer ..... Location.

Shell Pet. Corp.'s No. 1 E. M. Eliabourtout, in Section 22-8s-3e, 1¼ mile due N of discovery well..... Location.

Standard Oil Co. of Kans.' No. 1 Joseph Mouton ..... Derrick.

Superior Oil Co.'s No. 1 J. Sidney Arceneaux et al, 1,665 ft. N and 439 ft. W of SE cor. of Sec. 28-8s-3e .... Rigged up and S.D.

Superior Oil Co.'s No. 1 U. T. Iseringhauser, 1,331 ft. E and 502 ft. S of NW cor. of Sec. 35-8s-3e ..... Drlg. 4,965 ft.

Superior Oil Co.'s No. 1 Leo E. Kahan et al, 2,331 ft. N and 468 ft. W of SE cor. of Sec. 33-8s-3e ..... Drlg. hard sand 5,328 ft.

Superior Oil Co.'s No. 1 Elize Mire, 890 rt. S and 597 ft. W of NE cor. of Sec. 32-8s-3e ..... Drlg. shale 3,395 ft.

Superior Oil Co.'s No. 1 Looanstie Richard, 2,378 ft. S and 466 ft. W of NE cor. of Sec. 34-8s-3e ..... Drlg. sand and shale 3,279 ft.

Superior Oil Co.'s No. 1 Marcellus Savoie, 2,201 ft. S and 761 ft. W of NE cor. of Sec. 27-8s-3e ..... T.D. 1,264 ft.; skidded rig and bldg. new derrick.

CAILLOU ISLAND—TERREBONNE PARISH

Texas Co.'s No. 12 State Caillou Island, 2,420 ft. E and 73 ft. S of NW cor. of Sec. 20-23s-20e ..... Driving piling.

Texas Co.'s No. 13 State Caillou Island, 500 ft. SW of No. 11 well ..... Drlg. sand and boulders 1,209 ft.

CALCASIEU LAKE—CAMERON PARISH

Texas Co.'s No. 10-A State, 16,555 ft. W and 3,270 ft. N of NE cor. Sec. 1-14s-9w in Twp. 13s-9w ..... Drlg. shale 3,812 ft.

CAMERON MEADOWS—CAMERON PARISH

Burton-Sutton Oil Co.'s No. 1 School Land, 2,260 ft. W and 20 ft. N of SE cor. of Sec. 16-14s-13w ..... Milling out csg. 4,183 ft.

Burton-Sutton Oil Co.'s No. 4 School Land, 2,891 ft. W and 150 N of SE cor. of Sec. 16-4s-13w ..... Driving piling.
Humble O. & R. Co.'s No. 8 Cameron Meadows, 2,895 ft. W, 150 ft. S of NW cor. Sec. 21-14s-13w ..... Drlg. shale 2,914 ft.
Humble O. & R. Co.'s No. 1-B Cameron Meadows, 250 ft. W and 2,640 ft. S of NE cor. of Sec. 34-14s-14w... Drlg. shale 3,505 ft.
Texas Co.'s No. 1 Miami Corp. ..... Drlg. gumbo 1,480 ft.

CHOCTAW FIELD—IBERVILLE PARISH

Standard Oil Co.' of Louisiana's No. 6 Myrtle Grove Wilbert, Sec. 52-9s-11e ..... T.D. gumbo 656 ft.; W.O.C.

EDGERLY—CALCASIEU PARISH

Rex. Pet. Co.'s No. 13 Hunter, 466 ft. N, 90 ft. E of SW cor. of SE ¼ ..... T.D. 4,050 ft.; abnd.
Union Sulphur Co.'s No. 1 La Prairie Narrone, 1,061 ft. N, 250 ft. W of SW cor. SW Sec. 31-9s-11w ..... Salt 6,520 ft., T.D.; standing.

FOUR ISLAND—TERREBONNE PARISH

Texas Co.'s No. 3 State, Four Island ..... Rigging up.
Texas Co.'s No. 6 State, Four Island ..... Dredging canal.
Texas Co.'s No. 7 State, Four Island ..... Dredging canal.

GARDEN ISLAND—PLAQUEMINES PARISH

Texas Co.'s No. 11 Garden Island, 4,191 ft. S and 1,504 ft. W of NE cor. Sec. 107-23s-32e ..... Drlg. lime 1,675 ft.; no report.
Standard Oil Co. of Louisiana's No. 6 Myrtle Grove Wilbert, Sec. 52-9s-11e ..... Moving in rig.

GUEYDAN—VERMILLION PARISH

Pure Oil Co.'s No. 6 Alliance Trust, 667 ft. E, 1,787 ft. S line of lease, Sec. 34-11s-1w ..... Coring sand and shale 7,092 ft.

HACKBERRY—CAMERON PARISH

Calcasieu Oil Co.'s No. 2 Hanszen, 400 ft. W and 200 ft. S of No. 1 in Sec. 14-12s-10w ..... Drlg. shale 6,443 ft.
Gulf Prod. Co.'s No. 14-A Irwin, 300 ft. SE of No. 13-A .. Drlg. shale and lime 5,549 ft.
Sutton Oil Co.'s No. 1 Portier, 2,930 ft. W and 1,220 ft. N of SE cor. of Sec. 22-12s-10w ..... Derrick.
Texas Co.'s No. 10-B State, 1,000 ft. E, 200 ft. N of NE cor. Sec. 13-12s-10w ..... Drlg. shale 7,333 ft.
Texas Co.'s No. 12-B State, 500 ft. SE of No. 10-B or 1,360 ft. E and 149 ft. S of NE cor. of Sec. 13-12s-10w ..... Derrick.
Union Sulphur Co.'s No. 1 Barbee est., 1,720 ft. N line, 320 ft. E of SW cor. Sec. 12-12s-10w ..... T.D. 7,986 ft.; P.B. 6,729 ft.; setting whipstock.
Union Sulphur Co.'s No. 9 Humble, 300 ft. E and slightly N of No. 1 well, or 330 ft. N and 270 tf. E of the SW cor. of Sec. 12-12s-10w ..... Drlg. gumbo and lime 4,078 ft.
Yount Lee Oil Co.'s No. 11 Gulf Land, Sec. 14.12s-10w .. Drlg. shale and lime 6,851 ft.
Yount Lee Oil Co.'s No. 14 Gulf Land ..... Drlg. shale 4,291 ft.

IOWA—CALCASIEU AND JEFF DAVIS PARISHES

Barnsdall Oil Co.'s No. 2 Caffal ..... Derrick.
Barnsdall Oil Co.'s No. 6 Fontenot, 330 ft. from N and W lines of lease in Sec. 7-9s-6w ..... Rigging up.
Magnolia Pet. Co.'s No. 2 Gillison, 990 ft. W and 200 ft. N of SE cor. of lease in Sec. 12-9s-7w ..... Rigging up.
Magnolia Pet. Co.'s No. 7 Walt ..... Derrick.
Magnolia Pet. Co.'s No. 8 Walt, 993 ft. W and 330 ft. N of SE cor. of 160-acre lease ..... T.D. 6,896 ft.; W.O.C.
Shell Pet. Corp.'s No. 3 Ardoin ..... Drlg. 7,212 ft.
Shell Pet. Corp.'s No. 7 Heyd, 660 ft. out of NW cor. of lease, Sec. 13-9s-7w ..... T.D. 6,935 ft.; comp. 632 bbls. 24 hrs., 17 hrs. on 16/64-in. choke, 7 hrs. on 20/64-in. choke.
Shell Pet. Corp.'s No. 8 Heyd ..... Coring 6,432 ft.
Shell Pet. Co.'s No. 9 Heyd, 993 ft. W and 330 ft. S of NE cor. of 320-acre lease ..... Coring sand show oil 5,098 ft.
Shell Pet. Co.'s No. 4 E. D. Stafford, 990 ft. S and 330 ft. W of NE cor. of lease ..... Drlg. hard sand 6,001 ft.

JENNINGS—ACADIA PARISH

Yount Lee Oil Co.'s No. 13 Houssiere-Latrielle, Sec. 47-9s-2w, 300 ft. E of No. 12 ..... T.D. 7,354 ft.; flowed 400 bbls. oil, 700 lbs. pressure.

LAKE BARRE—TERREBONNE PARISH

Texas Co.'s No. 10 L.L.&E., 4,643 ft. S, 503 ft. W of NW cor. Sec. 30-21s-20 ..... Drlg. shale 3,690 ft.; no report.
Texas Co.'s No. 24 Lake Barre ..... Drlg. anhydrite 1,466 ft.
Texas Co.'s No. 28-A Lake Barre, 200 ft. SE from No. 17 in Sec. 39-21s-19e ..... Anhydrite 1,169 ft.; abnd.
Texas Co.'s No. 28-D State Lake Barre, 300 ft. SW from No. 27 in Sec. 40-21s-19w ..... Drlg. anhydrite 3,268 ft.

LAKE PELTO—TERREBONNE PARISH

Texas Co.'s No. 11 Lake Pelto, 1,600 ft. SW of No. 5 .... Rigging up.
Whitstone O. & G. Co.'s No. 1 Buckley, 300 ft. S and E, of NW cor. SW SW Sec. 35-19s-16e ..... Drlg. shale 1,704 ft.

LEESVILLE—LAFOURCHE PARISH

Robert Bowles' No. 2 Crosby, 2,408 ft. N and 1,952 ft. E of SW cor. of Sec. 26-21s-22e ..... T.D. 3,683 ft.; W.O.C.
Ben Coll and Texas Co.'s No. 1 LaFourche ..... Drlg. shale 2,781 ft.
Emerald Pet. Co.'s No. 3 State of Louisiana ..... T.D. 3,706 ft.; W.O.C.
Emerald Pet. Co.'s No. 4 State of Louisiana ..... Drlg. sand and gravel 430 ft.
Emerald Pet. Corp., No. 5 State of La., 1,878 ft. N of No. 1 well in Sec. 26-21s-22e ..... Location.
Emerald Pet. Corp.'s No. 6 State of Louisiana ..... Rigging up.
Gulf Ref. Co.'s No. 3 Allen Land Co., Sec. 26-21s-22e .... Drlg. hard sand 3,180 ft.
Gulf Prod. Co.'s No. 4 Bernard, 1,086 ft. N and 292 ft. E of SW cor. of L. Bernard 5.8-acre tract in Lot 4, Sec. 26-21s-22e ..... Shale 3,729 ft., T.D.; comp. 780 bbls.
Lincoln Oil Co.'s No. 1 Constantine ..... Rigging up.
Lincoln Oil Co.'s No. 6 State, 3,750 ft. N and 1,200 ft. E of SW cor. of Sec. 26 ..... Drlg. shale 709 ft.
Southern Sulphur Co.'s No. 1 Largrenze ..... Drlg. shale 3,977 ft.
Texas Co.'s No. 14 L.L.&E. ..... T.D. 3,684 ft.; W.O.C.
Texas Co.'s No. 16 L.L.&E. ..... T.D. 829 ft.; W.O.C.
Texas Co.'s No. 17 L.L.&E., 1,821 ft. S and 122 ft. E of NW cor. of Sec. 27-21s-22e ..... Derrick.
Texas Co.'s No. 18 L.L.&E., 2,638 ft. S and 1,056 ft. E of NW cor. of Sec. 26-21s-22e ..... T.D. 3,718 ft.; comp. 1,000 bbls., ½-in. choke.

LOCKPORT—CALCASIEU PARISH

Magnolia Pet. Co.'s No. 8 Farquhar, 850 ft. S, 190 ft. NE cor. NE¼ of SE¼, Sec. 8 ..... T.D. 5,634 ft.; pulling screen.
Magnolia's No. 25 Miller, 400 ft. N, 544 ft. W of Sec. 9-10-9, W of SE cor. NW ..... T.D. 4,393 ft.; pulling screen.
Magnolia Pet. Co.'s No. 26 Miller, 480 ft. S, 780 ft. E NW cor. SW¼ NW¼ Sec 9 ..... T.D. 4,386 ft.; rigging up to deepen.
Strake Oil Co.'s No. 1 Miller, 500 ft. due N of Yount Lee's No. 1 Miller, Sec. 8-10s-9w ..... Drlg. shale 6,375 ft.
Union Sulphur Co.'s No. 1 Farquaher, 200 ft. S and W lines, NE cor. SW SE Sec. 36-12s-10w, 2-ac. tract .. Tested salt water; S.D.; T.D. 7,469 ft.
Union Sulphur Co.'s No. 6 Moss, between Nos. 3 and No. 5 ..... Drlg. hard lime 5,768 ft.

PORT BARRE—ST. LANDRY PARISH

Texas Co.'s No. 17 Botney Bay, 1,800 ft. S 3 deg. W, 600 ft. N 82 deg. most southern NE 560 deg. tract, Sec. 4-6s-5e ..... Sand 3,240 ft.; killed well and preparing to deepen.

SORRENTO—ASCENSION PARISH

Union Sulphur Co.'s No. 26 United Land ..... T.D. 1,340 ft.; W.O.C.

STARKS—CALCASIEU PARISH

Union Sulphur Co.'s No. 5 Industrial Lbr. Co., 300 ft. S of No. 4, Sec. 30-9s-12w ..... Drlg. water sand 5,151 ft.

SULPHUR—CALCASIEU PARISH

Union Sulphur Co.'s No. 776 fee ..... Drlg. water sand 3,752 ft.
Union Sulphur Co.'s No. 788 fee, 602 ft. S, 1,209 ft. W of C Sec. 29-9s-10w ..... T.D. 6,103 ft.; drlg. new hole; water sand 4,396 ft.
Union Sulphur Co.'s No. 790 fee, 929 ft. S and 802 ft. W of center of Sec. 29-9s-10w ..... T.D. 6,151 ft.; abnd.
Union Sulphur Co.'s No. 791 fee, 529 ft. N, 907 ft. E of SW cor. Sec. 33-10s-12w ..... T.D. 5,607 ft.; set whipstock 2,408 ft.; junked and aband. 3,453 ft.
Union Sulphur Co.'s No. 794 fee ..... Drlg. sand and shale 4,669 ft.
Union Sulphur Co.'s No. 795 fee ..... Location.
Union Sulphur Co.'s No. 796 fee ..... T.D. 1,918 ft.; P.B. 1,893 ft.; W.O.C.
Union Sulphur Co.'s No. 797 Fee, 1,682 ft. W, 418 ft. N of Center of Sec. 29-9s-10w ..... Derrick.
Union Sulphur Co.'s No. 798 Fee, 673 ft. N, 575 ft. W of center of Sec. 29-9s-10w ..... Drlg. rock 1,661 ft.
Union Sulphur Co.'s No. 799 fee ..... Drlg. rock 1,825 ft.
Union Sulphur Co.'s No. 1 Bernard Ulrich, 75 ft. out of SW cor. Sec. 19-9s-10w ..... T.D. 5,738 ft.; fishing stuck drill stem.

SWEET LAKE—CAMERON PARISH

Pure Oil Co.'s No. 12 Yount Lee fee, 800 ft. S of No. 11, in line with Nos. 9 and 10, Sec. 12-13-3w ..... Drlg. 7,442 ft.

WHITE CASTLE—IBERVILLE PARISH

Shell Pet. Corp.'s No. 8 Wilbert, 717 ft. N 60 deg. 30 min. E from SE of Lot 2 of Fractional Sec. 9, in Sec. 1-11s-11e ..... Sand 4,573 ft.; S.D.

VINTON—CALCASIEU PARISH

Tri-Oil Co.'s No. 1 Matilda Gray, 38 ft. W, 35 ft. N, of SE cor. NE SW NE Sec. 33-9s-12w ..... T.D. 3,535 ft.; bldg. pump. unit.
Vinton Oil Co.'s No. 6 Gray ..... Rigged up to deepen; T.D. 3,403 ft.
Wilson Broach Co.'s No. 11 Wilson strip (workover) ..... Sand 4,110 ft.; sidetracked 3,260 ft.
Wilson Broach Co.'s No. 15 Wilson strip ..... T.D. 3,256 ft.; preparing to pump.

MISCELLANEOUS WILDCATS

TEXAS

AUSTIN COUNTY

R. R. Mitchell's No. 1 H. Schleider, J. F. Fitzgibbons Sur., 300 ft. out NE cor. 96-ac. tract ..... T.D. 105 ft.; S.D.
Sun Oil Co.'s No. 1 Zetik, 662 ft. from N line and 1,509 ft. from W line of 104-acre tract in S. M. Williams Sur. ..... T.D. 3,300 ft.; abnd.

BRAZORIA COUNTY

C. & R. Dev. Co.'s No. 1 National Life Co., 340 ft. from W line and 340 ft. from N line of 100-acre tract out of W end Nos. 3 and 4 in Henry Austin League No. 4, Abst. No. 12 ..... Rigging up.
Danciger O. & R. Co.'s No. 3-A Hunt, 2,100 ft. from E, 2,000 ft. from S lines of Hunt's 1,000-ac. tract in W. C. Carson Sur. ..... T.D. 6,797 ft.; fishing 12 fourbies drill stem.
Danciger Oil & Ref. Co.'s No. 1-B Hunt, 1,400 ft. from NW line and 1,750 ft. from NE line of 1,600-acre tract in W. C. Carson Sur. ..... Sand 6,875 ft.; cmtd. back 6,813 ft.; drilled 6,852 ft.; washed and flowing fresh water; T.P. 2,200 ft.
Danciger Oil & Ref. Co.'s No. 1 Stark-Brown, 330 ft. out of most easterly NE cor. of lease in Perry & Austin Sur. ..... T.D. 3,965 ft.; S.D.

BRAZOS COUNTY

H. Elliott et al's No. 1 W. F. Odom, near center of 379-ac. tract in SW cor. of Isaac Curil Sur. ..... Cmtd. surface csg. 30 ft.
F. H. Scott's No. 1 Klintworth, I. Curd Sur., 300 ft. from N line, 400 ft. from E line ..... T.D. 2,500 ft.; fighting gas.
D. W. Young, Jr.'s (H. L. Bleam) No. 1 Harrison, 300 ft. from S and W lines of lease in J. D. Allcorne Sur. ..... Spudded and S.D.

BURLESON COUNTY

Southern Seaboard Co.'s No. 1 J. H. Coulter, 9,400 ft. from SW line and 2,200 ft. from NW line of 1,176-acre tract in SE cor. of County in A. Kennon Sur... Derrick.

CALHOUN COUNTY

Continental Oil Co.'s No. 1 American Nat. Realty Co., C of NE of Sec. 6, Blk. C ..... T.D. 1,472 ft.; W.O.C.
Herman Heep Oil Co.'s No. 1 Welder, 7,500 ft. from W line of river ..... T.D. 6,500 ft.; abnd.
Herman Heep's No. 2 Welder ..... Location.
Herman Heep Oil Co.'s No. 1-B F. Welder ..... Coring sand 3,911 ft.
J. H. Meek et al's No. 1 R. Adamans, C of NW line of Sec. 45, 2½ miles NE of McCamey ..... Location.

CHAMBERS COUNTY

John H. Carreker's No. 1 B. Weaver, 404 ft. out of SE cor. of lease in A. Weaver Sur. ..... Drlg. 2,180 ft.
Miramar Oil Co.'s No. 1 Geo. Stengler, 3,200 ft. W of E line and center of N and S lines of lease in V. Barrow Sur. ..... T.D. 6,392 ft.; abnd.

COLORADO COUNTY

Coyle-Concord Oil Co.'s No. 1 Nelson, 3,200 ft. SE of NW cor. of section, 2,200 ft. SW at right angles in L&G.N. Sur. ..... T.D. 4,052 ft.; R.U. and S.D.
Union Central Oil Co.'s No. 1 Mann, 620 ft. from W line and 330 ft. from N line of 20-acre tract in J. L. Dugat Sur. ..... Location.

FAYETTE COUNTY

Colorado Oil Co.'s No. 1 Anders ..... Drlg. soft sand 2,620 ft.

FORT BEND COUNTY

Edwards Drlg. Co.'s No. 1 H. Hausler, 780 ft. S of NE cor. of 103-acre tract, 510 ft. W of E line, Wickson Sur. ..... T.D. 3,675 ft.; heaving shale; P.B. 3,236 ft.; comp. 45 bbls. day.
Joe Moffat's No. 1 Blakly, 100 ft. from N and W lines of Lot 4, Block C ..... T.D. 417 ft.; S.D.
J. E. Selber's No. 1 J. B. Farmer, 150 ft. out of most southerly cor. of 50-ac. tract in Jas. Scott Sur. ... Rigging up.

GALVESTON COUNTY

George K. Spoor's No. 1 Maco Stewart, 1,626 ft. N of SE cor. of Alex Farmer Sur. and 1,175 ft. E in W. K. Wilson Sur. (4 miles S of Dickinson) ..... Coring 5,824 ft.
Humble O. & R. Co.'s No. 1 Maco Stewart, C of E and W lines of 400-acre tract in John Sellars Sur., S of Dickinson Bayou, 3 miles N of Spoor well ..... Drlg. shale 2,055 ft.

GRIMES COUNTY

Clark & Dodd's No. 1 Murry, 150 ft. W line, 300 ft. S line, Anderson Sur. ..... S.D. 1,305 ft.
Marshall et al's No. 1 J. W. Dodd, 400 varas S and 275 varas W of NE cor. of 150-acre Dodd tract in Timothy Jones Sur. ..... Old T.D. 810 ft.; rigged up to deepen.
W. D. Roan et al's No. 1 D. C. Kelly, 1,532 ft. from N line and 168 ft. from E line of U. Sanders Sur., near Carlos ..... Derrick.

HARDIN COUNTY

Wilcox Oil & Gas Co.'s No. 1 Sternberger, 1,328 ft. N of S line and 1,311 ft. W of E line of C. Dorsey Sur. No. 1 ..... Spud.

HARRIS COUNTY

C. C. Foster and others' No. 1 H. K. Johnson, 2,000 ft. from S line and center of E and W lines of G.C.&S.F. Sur. ..... Rigged up and S.D.
General Crude Oil Co.'s No. 1 Rorick, est. 5,606 ft. S of N line of survey and 1,546 ft. W of E line of 1,426-acre tract in John C. Ogburn Sur. ..... Rigging up.
Glenn H. McCarthy's No. 2 Preston on 80 ac. in Sec. 2, Blk. 9, 4 miles W of LaPorte ..... Location.
Imperator Oil Co.'s No. 1 Brooks Est., 7,400 ft. S and W of NE cor. of R. & R. Vince Sur. ..... Derrick.
J. A. Hodges' No. 1 Scott, 200 ft. S, 900 ft. W of intersection of Crosby Huffman, F. Rankin Sur. ..... T.D. 6,275 ft.; S.D.
J. E. Selber's No. 1 Tyrell & Gareth, 2,800 ft. from E line and 2,400 ft. from N line of survey, Lot 18, Blk. 20, Highland Subd., Ashbell Smith Sur. ..... Drlg. shale 5,816 ft.

Loring Oil Co.'s No. 1 Westmoreland, Lot 3, Blk. 33, Westmoreland Addition ..... Spudding.
W. U. Paul's No. 1 E. M. House, 2,300 ft., N and 1,000 ft. E of NE cor. of E. Benson Sur. in M. Magruder Sur. ..... Set 10-in. at 1,000 ft.; S.D.

JACKSON COUNTY

Encio Gas Co.'s No. 1 Siedel & Simmons, 150 ft. from SW line or 300 ft. NE at right angles from No. 1 Toney, in Raymond Musquis Sur. ..... Drlg. 2,000 ft.
Heep Oil Co.'s No. 1 R. Welder, 1 mile SW of Plymouth discovery ..... Location.

JASPER COUNTY

Louis Franklin's No. 1 Cartwright, 360 varas E line and 740 varas S line of Lot 19, Edward Legrande Sur. ... Coring 4,462 ft.; T.S. 4,457 ft.

JEFFERSON COUNTY

Gulf Prod. Co.'s No. 1 I. W. Jumper, 700 ft. W, 350 ft. S of NE cor. of 260-ac. tract in W. H. Smith League Drlg. gumbo 2,506 ft.
Lucky Strike Oil Co.'s No. 1 Walker, D. Easley Sur., 2,100 ft. N, 1,400 ft. E of NW cor. of Lot No. 13 ... S.D. 1,708 ft., shale and lime
Sun Oil Co.'s No. 1 H. Long, 1,500 ft. N line, 990 ft. E line of lease ..... Drlg. plug 7,138 ft.

LIBERTY COUNTY

Extension Oil Co.'s No. 1 J. A. Lovett, 200 ft. from E and 600 ft. from S line of lease, P. P. Deevers Sur.. Drlg. shale 2,266 ft.
Gulf Prod. Co.'s No. 1 Kirby, John Pleasants Sur., 1,866 ft. S of No. 1 ..... Hard shale 8,734 ft.; P.B. 5,600 ft.; drlg. shale and shells 5,675 ft.
Gulf Prod. Co.'s No. 4-C Kirby, 1,700 ft. due W of No. 1 discovery well in John Pleasant Sur. ..... Drlg. sand and gravel 226 ft.
H. Sample's No. 1 Security Trust Co., 466 ft. from S and E lines of N 600 ac. of Lot 3 of H. Sample Subd. of J. Faulk Sur. ..... Coring 6,705 ft.
Thomas et al's No. 1-A Eicke, 660 ft. from W line and 2,350 ft. from S line of tract in Green Sur. ..... T.D. 5,058 ft.; D.S. test 5,025 ft. ¼-in. choke, 5 min., 8 thribbles mud; S.D. orders.

MADISON COUNTY

Hall Edwards et al's No. 1 Fulcher, 1,161 ft. from E line and 1,633 ft. from N line of Fulcher Sur. ..... Drlg. 2,050 ft.

MATAGORDA COUNTY

Continental Oil Co.'s No. 1 Robbins ..... Location.
Dr. Griffith's No. 1 fee, 3,000 ft. from N line and 3,000 ft. from W line of Wm. E. Bell Sur. ..... Rigged up and S.D.
Oils Consolidated's No. 2 Hawkins, 200 ft. due NE of No. 1 well ..... Drlg. 4,700 ft.
United North & South Dev. Co.'s No. 1 Unit 4, Buckeye farm, J. C. Keller league, 314 ft. N line and 302 ft. E line of lease ..... T.D. 7,871 ft.; tested S.W.; run string 4½-in. blank liner to shut off water.
United North & South Dev. Co.'s No. 1 Unit 6 (No. 2 Stoddard), 25 ft. each way out of NW cor. of Lot 19, Buckeye townsite ..... T.D. 9,457 ft.; shot D.S. 5,750 ft.; sidetracked at 5,500 ft.; drlg. 5,655 ft.
United North & South Dev. Co.'s No. 1 Unit No. 58, 250 ft. N and 200 ft. W of SE cor. of Unit No. 58 ..... Derrick.

MONTGOMERY COUNTY

Baker et al's No. 1 Benker, D. James Sur. ..... O.T.D. 4,921 ft.; sidetracked 3,823 ft.; sand 4,645-67 ft.; T.D. 4,690 ft.; Schlumberger test showed S.W.; S.D.
Cooper & Smith's No. 1 Post, Daniel Roper Sur. ..... T.D. 4,007 ft.; abnd.
Deering & Frazier's No. 1 L. Hicks, T. Taylor Sur., 660 ft. S and W of NE cor. of 565-acre tract ..... Completed water well.
Humble O. & R. Co.'s No. 1 Texas Long Leaf Lumber Co., 466 ft. out of SE cor. of 2,000-acre tract in Walker County, S.L. Sur. ..... T.D. 5,938 ft.; sand 5,921-38 ft.; making drill stem test.
Steen Drlg. Co.'s No. 1 Long Bell Lbr. Co., 440 ft. S and E from NW cor. of Wilson Barker Sur. ..... Top Cockfield 5,815 ft.; sand 5,867-69 ft., sand 5,873-77 ft.; D.S. test 5,855-77 ft. showed 350 lbs. pressure with 2 gals. dist. and 2 gals. mud in 4 min.; coring 5,921 ft.; D.S. test 5,873-84 ft., 575 lbs. pressure, 15 min., 1 joint brown dist., ¼-in choke on top, ⅝-in. choke on bottom; D.S. test 6,016-53 ft.; showed 23 thribbles salt water 11 min., 250 lbs.; sidetracked while running pipe; P.B. 2,300 ft.; D.S. test 5,957-63 ft. failed; T.D. 6,041 ft.; S.W.; P.B. to 5,841 ft.; made 45 bbls. distillate 12 hrs. through ⅝-in. choke on casing and ¼-in. choke on tubing, 2,110 lbs. pressure; est. 30,000,000 ft. gas.

NACOGDOCHES COUNTY

Dick Schwab's No. 1 Rambin, J. Simpson Sur. ..... T.D. 4,920 ft.; aband.

ORANGE COUNTY

Blue Line Oil Co.'s No. 1 Godwin, Richard Ballew Sur., 300 ft. from E line and 150 ft. from NE line of Godwin 30-acre tract ..... S.D. shale 1,255 ft.
Texas Louisiana Oil Co.'s No. 1 Starks, 2,450 ft. N of NW cor. M. Delano Sur. 68, 10,500 ft. E at R/A .... T.D. 5,055 ft.; S.D.

POLK COUNTY

Alpha Pet. Co.'s No. 1-B Kirby & West, 3,000 ft. E of Schwab's No. 2 and 150 ft. N of S line of 100-acre tract and survey in G. S. Thomas Sur. ..... Drlg. shale 1,269 ft.
Howard Dailey et al's No. 1 Z. B. Knox, 1,450 ft. W and 1,920 ft. S of NE cor. of F. Chairs Sur., 1¼ mile NE of Corrigan ..... Derrick.

REFUGIO COUNTY

C. B. Bunte's No. 2 Rook, 12,400 ft. from W and 11,500 ft. from N line of Antonio De Lavina Sur. ..... T.D. 5,009 ft.; S.D.; will be carried to 6,000 ft.
Bunte's No. 3 Rooke, Antonio De Lavina Sur. ..... T.D. 5,010 ft.; to drill to 6,000 f..
Cox et al's No. 1 F. W. Bissett, J. Crockett Sur. ..... Coring shale 5,718 ft.
Heard-Holland Oil Co.'s No. 1 Peck, 366 ft. N and W out of NW and SW of Bonnie View Subd. ..... T.D. 5,351 ft.; running csg.; D.S. test 5,330-37 ft., 11 mins., 400 lbs. pressure, ¼-in. choke top and 5/16-in. choke on bottom; D.S. test 5,337-51 ft. showed 220 lbs. pressure, 11 mins., and 100 ft. mud cut with gasoline and some fresh water.
Humble Oil & Ref. Co.'s No. 13 O'Connor, 933 ft. NE of No. 12 and 933 ft. NW of No. 11 on 5,545-acre tract in John Keating Sur. ..... T.D. 3,190 ft.; P.B. 3,016 ft.; comp. 1,250,000 ft. gas with spray oil.
Humble O. & R. Co.'s No. 14 O'Connor in John Keating Sur. ..... T.D. 3,336 ft.; aband.
G. Jeffries' No. 1 James F. Power, 750 ft. from N and 1,812 ft. from E lines of 500-acre lease in J. J. Garza and J. Vidaurri Sur. ..... Drlg. gumbo 3,064 ft.
Quintiana's No. 1 Thos. O'Connor, Crunk Sur., 8 miles NE of town of Refugio and 3 miles SE of Greta Field ..... Coring 4,950 ft.; D.S. test 4,909-50 ft. in 4½ mins., 550 lbs. pressure and 12 ft. mud cut with oil and recovered 3 gals. of 50 gravity oil.
Nesral-Baymore's No. 22 E. Heard, Ximines Sur. ..... Drlg. shale 300 ft.; 16-in. csg. at 281 ft.

SAN AUGUSTINE COUNTY

Fidelity Exploration Co.'s No. 1 Bryan & Flourney, 1,926 ft. from N and 725 ft. from E lines of Sec. 14, S.P.R.R. Sur. ..... T.D. 2,005 ft.; S.D.; moving in heavy rig to drill to Woodbine.

SAN JACINTO COUNTY

Darby Jones' No. 1 McBee ..... T.D. shale 2,950 ft.; S.D.
Turnbull & Irwin's No. 1 Foster Lumber Co., 440 ft. W of Shell 100-acre tract and 150 ft. S of Evergreen road in NW part of Wm. Dobie Sur. ..... T.D. 4,936 ft.; S.W.; abnd.

TYLER COUNTY

Boone-Wallace & Lane's No. 1 Cruse ..... Rigging up.

VICTORIA COUNTY

C.R.&G. Drlg. Co.'s No. 1 R. C. Roos, 486 ft. from N line and 1,666 ft. from E line of tract in M. A. Castanon Sur. ..... Reaming 4,960 ft.
Humble O. & R. Co.'s No. 1 Mitchell, 1,401 ft. from NE and NW lines of 5,000-acre tract in E. Benavides Sur. ..... Drlg. 3,950 ft.
Petrol Corp.'s No. 1 John Machaiic, 1,320 ft. out of S cor. of 135-acre tract, Rafael Mancha Sur. ..... T.D. 2,875 ft.; drlg. in.
Texas Co.'s No. 2 McFaddin, 9,150 ft. S and 200 ft. E at right angles out of NW cor. of C. M. B. Hoyt Sur. ..... T.D. 2,025 ft.; prep. to W.O.; R.U.

WALKER COUNTY

George W. Strake's No. 1 G. P. Thompson, 1,298 ft. from N line and 188 ft. from W line of 103.9-acre tract of Jackson Crouch Subd. of Jose Marie de la Garza Sur. ..... Spudding.

WALLER COUNTY

Amerada & Stanolind Oil & Gas Co.'s No. 1 Mary Manor, C of Sec. 93, Blk. 1, H.&T.C. Sur. ..... T.D. 6,621 ft.; sand and sandy shale 6,583-6,621 ft.; reaming to make D.S. test.
L. W. Capps and C. J. Sloan's No. 1 Vaughn, 1,200 ft. N of Kirby's No. 1 Vaughn, J. MacFarland Sur. No. 46 ..... T.D. 2,853 ft.; shale; S.D.

WHARTON COUNTY

Pure Oil Co.'s No. 2 Wallace Houston, 1,511 ft. SW. 466 ft. SE of N cor. of Wallace Houston 160-ac. tract, in the T. W. Heard Sur. No. 28, Abst. 509.... Location.
Pure Oil Co.'s No. 2 Stewart, Morris & Cummings Sur., Sec. 35, 990 ft. out of SW cor. of 160 acres ..... Drlg. 7,836 ft.

SOUTH LOUISIANA

ACADIA PARISH

Edwards Drlg. Co.'s No. 1 Daigle, NE cor. of SE of Sec. 24-7s-1e ..... T.D. 1,259 ft.; W.O.C.
Rhodes Drlg. Co.'s No. 1 Latrell ..... S.D. 2,280 ft.

AVOYELLES PARISH

Hass & Stokes' No. 1 Hass, from NE cor. SE Sec. 28 go along E line of Sec. 28 2,486 ft. to point on highway, thence 84° E on highway for 386 ft., thence N 87° E for 4,426 ft., then N 45° E 226 ft.... Rigging up.

BEAUREGARD PARISH

Federal Pet. Co.'s No. 1 Lutcher-Moore, 467 ft. S and 467 ft. E of the NW cor. of Sec. 4-6-12 ..... S.D. 900 ft.
F. W. Martin's No. 1 J. E. Cochran, SE cor. of NE of Sec. 34-4s-12w (W part of county and 6 miles S of Merryville) ..... Shale 4,040 ft.; S.D.

CALCASIEU PARISH

Fred Oil Co.'s No. 1 Faisst, 566 ft. N, 300 ft. W of SE cor. of NW of SE Sec. 26-8s-10w ..... Drlg. 2,825 ft.
Steinberger Pet. Co.'s No. 1 Drew, 330 ft. out of NW cor. of NE¼ of Sec. 26-10s-11w, 6½ miles SW of Sulphur ..... Location.
Union Sulphur Co.'s No. 2 Barbe, 279 ft. S and 350 ft. W of NE cor. of SE of Sec. 11-9s-8w ..... Drlg. 2,210 ft.; no report.

CAMERON PARISH

Southern Sulphur Oil Corp.'s No. 1 Gulf of Mexico, near the mouth of the Calcasieu River ..... Drlg. gumbo 3,225 ft.

IBERIA PARISH

T. D. Spell's No. 1 Bernard, 5,138 ft. SW cor. along western boundary line, then in NE direction 1,140 ft. along N line of Bernard land, 52 ft. S of well in Sec. 54-12s-7e ..... T.D. 3,791 ft.; S.D.

IBERVILLE PARISH

Gross Pet.'s No. 1 Angelloz ..... T.D. 2,270 ft.; fishing.

JEFFERSON DAVIS PARISH

Humble O. & R. Co.'s No. 3 Devilbiss, 1,399 ft. W. 466 ft. S of NE cor. Sec. 14-9s-4w ..... Rigging up.
Shell Pet. Corp.'s No. 1 Jernigan, 330 ft. E, 660 ft. S, NW cor. Sec. 12-9s-4w ..... Rigging up.
Shell Pet. Corp.'s No. 1 Kratzs, 660 ft. S, 330 ft. W of NE cor. NW Sec. 12-9s-4w ..... D.S. test 8,659-77 ft., 12 min., 5½ bbls. 37 grav. P.L. oil, 70 lbs. pressure; cored to 8,682 ft.; flow 1,035 bbls. 24 hrs., 18-64-in. choke; T.P. 1,500 lbs.; C.P. 1,525 lbs.; flowed 1,132 bbls. 24 hrs. through 18/64-in. choke, T.P. 1,550 ft., C.P. 1,550 lbs.
Tide Water Oil Co.'s No. 1 Mrs. A. Bourgeois, 250 ft. E and 205 ft. S of C of Sec. 28-9s-5w ..... T.D. 5,213 ft.; P.B. 4,100 ft.; W.O.C.

LAFOURCHE PARISH

Barnsdall Oil Co.'s No. 2 Harang Plantation ..... T.D. 6,768 ft.; S.D.
R. L. Gay, trustee's No. 1 Godchaux, 3,920 ft. N and 1,746 ft. E in common cor. of Lots 34 and 26, Twp. 15s-19e ..... Moving in rig.
Southern Sulphur Corp.'s No. 1 D. L. Lagraise, 800 ft. E of NW cor. of Lot 7, thence 250 ft. S of Sec. 26-21s-32e ..... Spudded and S.D.

PLAQUEMINES PARISH

Southern Sulphur Oil Co.'s No. 1 Bay Adams, 2,325 ft. W and 826 ft. S of NE cor. of Sec. 23-20s-23e ..... Drlg. 3,180 ft.
Venice Corp.'s No. 1 Burras ..... S.D. 40 ft.; prep. to start up.

ST. BERNARD PARISH

Joe Danciger's No. 1 Delacroix Land Fur Co., 2,442 ft. W and 660 ft. N of SE cor. of Sec. 127-14s-14e ..... Location.
Southern Sulphur Oil Co.'s No. 1 State-Lake Borgue, 850 ft. N and 230 ft. E of SE cor. of Sec. 33-12s-15e ..... Drlg. 1,469 ft.
Southern Sulphur Corp.'s No. 1 Lake Lery, 400 ft. W, 500 ft. N, SW cor. Sec. 28-13s-15e ..... Drlg. sand and shale 2,722 ft.

ST. LANDRY PARISH

Bailey Gaunce's No. 1 Lewis, 300 ft. N and E of SW cor. of NW of NE of Section 29-5s-6e (workover) .. T.D. 5,017 ft.; S.D.
H. H. Hotchins Lbr. Co.'s No. 1 Whiteman Lbr. Co., 250 ft. out of SW cor. NE Sec. 15-5s-6e ..... S.D. 3,696 ft.

ST. MARTIN PARISH

Texas Co.'s No. 6 St. Martin Land Co., 660 ft. S and 500 ft. W of NE cor. SE Sec. 17-8s-7 ..... Drlg. shale 6,161 ft.

ST. MARYS PARISH

Black et al and Edwards Drlg. Co.'s No. 1 Chetimancha. Sec. 34-13s-9e, 219-acre tract approximately 500 ft. at right angles SE and SW lines of tract ..... Drlg. shale 6,370 ft.

TERREBONNE PARISH

Texas Co.'s No. 1-B State-Bay Junop, 2,300 ft. N, 950 ft. E of SW cor. Sec. 27-21s-14e ..... Drlg. hard sand 6,700 ft.
Texas Co.'s No. 13 State-Caillou Island, 800 ft. SW of No. 11 ..... Rigging up.
Texas Co.'s No. 11 Lake Pelto, 1,600 ft. SW of No. 5 ... Driving piling.
Texas Co.'s No. 3 School Board, 2,630 ft. S and 1,384 ft. E of NW cor. of Sec. 16-22s-18w ..... Rigging up.
Texas Co.'s No. 4 School Board, Sec. 16-22s-18w ..... T.D. 3,863 ft.; abnd.

VERNON PARISH

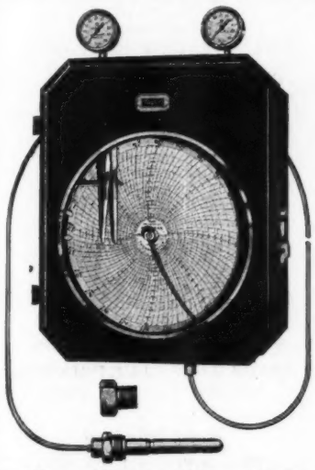
Robt. K. Williams, Jr.'s No. 1 Llano Del Rio, 1,185 ft. S, 1,000 ft. W of NE cor. Sec. 7-1n-9w ..... Rigged up and S.D.

NEW AND IMPROVED EQUIPMENT

Throttling or On-and-Off Control Given by Device

One of the difficulties encountered in control problems has been that of maintaining either throttling or on-and-off control when desired. The difficulty has been due to the limited number of fixed "sensitivity" adjustments for balancing regulator performance against the time lag in the apparatus under control.

The Universal sensitivity adjuster incorporated in all Taylor "Fulscope" regulators, is said to solve the problem by



providing a full-range sliding adjustment by which the regulator performance can be balanced for any degree of apparatus time lag. A simple screw-driver adjustment on a graduated dial gives throttling or on-and-off diaphragm valve action, whichever provides the desired type of control. The adjustment does not require a skilled operator, removal of chart, or interruption of service.

Another feature of importance is found in the fact that the regulator mechanism and means of adjustment of all Taylor "Fulscope" regulators are the same whether for controlling temperature, pressure, rate of flow, or liquid level. They differ only in their means of actuation. This insures uniformity of instrument operation and processing results on either continuous or batch processes, quick and thorough training of operators, and interchangeability of parts.

A high degree of accuracy is produced by a new lightweight duralumin mechanism, practically frictionless bearings, and other simplifications and refinements of design. Regulator action can be converted easily and quickly from direct to reverse, or vice versa, without addition or subtraction of parts. This permits any combination of regulator and diaphragm valve action best suited to processing requirements.

Temperature or pressure regulators are readily adaptable to applications requiring a different temperature or pressure range by simply substituting a tube system and chart with the required range. It is equally easy for the operator to convert a temperature instrument into a pressure instrument, or vice versa. Further details may be obtained from the Taylor Instrument Companies, Rochester, N. Y.

The Chain Belt Co., Milwaukee, Wis., has placed a stock in its Detroit, Mich., warehouse, consisting of all types of malleable and steel chains, steel roller chain, chain sprockets, buckets, set collars, pillow blocks and takeups.

Among the Equipment Houses

The Coppus Engineering Corp., Worcester, Mass., has appointed Lawrence K. Cecil, 1531 East Thirty-fifth Street, Tulsa, to handle sales of Annis air filters for air compressors and for industrial and ventilating applications in Oklahoma and Texas territory.

—

The Graver Tank & Manufacturing Corp., Chicago, has appointed Guy H. Newton as works manager.

—

Ted Weiner, owner and manager of the B. & W. Machine & Supply Co., has opened a new shop in Monahans, Tex.

—

"The Relation of Steelmaking to Heat Treatment and Machinability," was the subject of an address delivered before the annual meeting of the Cleveland Chapter, American Society for Metals, Monday evening, May 7, at the Cleveland Club, by Harry W. McQuaid, Republic Steel Corp., Youngstown, Ohio.

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The Homestead Valve Manufacturing Co., Coraopolis, Pa., announces the following new exclusive representatives for Homestead valves: Grinnell Co., 240 North Highland Avenue, Atlanta, Ga.; L. E. Livingston, 2012 Ward Parkway, Fort Worth, Tex.; and the National Supply Co., Toledo, Ohio.

—

The Pittsburgh Equitable Meter Co. has added E. E. Spargo to its sales force. Mr. Spargo, who will specialize in liquid meter sales, will cover the eastern territory, with headquarters in the company's office.

—

W. M. Combs, formerly representing the Walworth Co. in Shreveport, La., has been made manager of the company's Tulsa office.

—

At a recent meeting of the Westinghouse Electric International Co., George H. Bucher was elected president.

—

Allen M. Peairs, formerly with Ampco, Inc., has severed his connections with that organization and has engaged in the oil refinery engineering business under the name of Ampco Engineering & Development Co.

BARREL STACKER ANNOUNCED

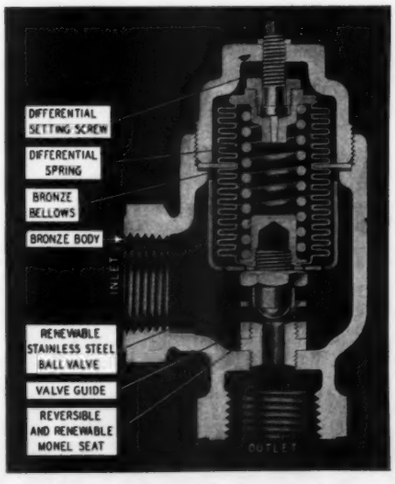
A new barrel stacker or portable elevator for oil refiners, chemical plants, paint manufacturers, and all other industries handling barrels and drums, called the "Safety" barrel stacker, illustrated and described in circular No. 181, has been designed by the Lewis-Shepard Co., Watertown, Mass. This device can be equipped with holding strips on platform to prevent barrel rolling off, equipped with turntable in platform to turn drums, equipped with removable rollers to handle cases, equipped with platform rolls to rotate barrels so they will come "bung up" in rack, and has double "knee-action" or hinges so it may bend down when moving under beams, low ceilings or through doorways.

PORTABLE RIG OPENS BRANCH

The Portable Rig Co., Inc., distributor for Waukesha engines in Texas, has opened a store at 1101 Young Street, Dallas, with W. S. Lightbourn in charge. This gives Portable Rig three sales and service locations in Texas. General offices are maintained in Houston, from which point service to the Gulf Coast and Southwest Texas operators is offered. L. E. Hodges, general manager, and L. D. Cain, sales manager, are located in the Houston office. The East Texas and Northern Louisiana fields are serviced from the Longview, Tex., store, where D. C. Gassoway and R. L. Hodges are located. The new Dallas branch store will handle sales and service in North and West Texas fields.

Tagliabue Brings Out New Thermostatic Steam Trap

The C. J. Tagliabue Manufacturing Co., Brooklyn, N. Y., has brought out a new and improved thermostatic steam trap for industrial use. These traps are offered in one-half, three-quarters and 1-inch sizes with greater capacity and greater steam economy. By virtue of unique principles applied to design and construction, they are said to do the work of larger and more costly traps.



The Tag differential setting feature, which proved successful on the company's original trap, has been retained to assure saving of steam. An adjusting screw at the top of the trap may be set to discharge condensate at a temperature corresponding to as much as 20 pounds less than the operating steam pressure, whether it is 50, 75 or 125 pounds, without any further adjustment.

Other advantages are the renewable and reversible double-life Monel seat and a renewable stainless steel ball valve, the ball of which is true to within 0.00005 of an inch. As a further protection the renewable valve guide holds the ball valve central to the seat and thus insures tight closing.

The company has just issued a bulletin illustrating and describing the many features of these new traps and will send it on request.

Men Well Known in the Equipment Field

G. H. WALLACE

G. H. (Doc) Wallace, who for the last 14 years has been works manager for one of the country's largest Diesel engine manufacturers, has been appointed sales manager of the Guiberson Diesel Engine Co. and is beginning formation of a national selling organization.

Electronic Relay Operates Potentiometer Pyrometer

The Bailey Meter Co., Cleveland, Ohio, has developed a new potentiometer pyrometer named "Galvatron" after the galvanometer-electronic relay circuit which it employs to operate slide wire resistances and recording pens.

One Galvatron may include as many as four potentiometer circuits, the contact-making galvanometer being automatically switched from one circuit to the next by relays actuated from contacts made by a synchronous motor driven time device. One powerful synchronous motor drives these timing contacts for the relay as well as the galvanometer contacting mechanism, the recording chart, and the automatic standardizing relay contacts.

The Galvatron mechanism consists of a galvanometer of short period arranged to make contacts of a duration proportional to the deflection of the galvanometer needle from neutral. These contacts which close the circuit to the electronic relay carry only a few micro-amperes of current, and are connected to the grids of pliotron tubes. A galvanometer contact permits the flow of direct current through one pliotron tube and the direct current winding of its transformer whose second winding is in series with one field coil of a reversible synchronous motor driving the potentiometer unit. This flow of direct current permits a flow of alternating current through the transformer and field coil, thereby rotating the motor in one direction. Rotation in the opposite direction is produced in the same manner by energizing the other field coil through a second electronic relay when the galvanometer needle swings to the other side of neutral.

Repressuring Considered in Kane to Butler District

(Continued from Page 72)

fighting equipment from Franklin, Oil City, Warren and Butler.

Gas Field Operations

The Harrison anticline find of Lycoming Producing Co. on the Schoffield farm in Harrison Township, Potter County, which got a show of 30,000 feet of gas when it found the Oriskany last week, has started blowing in and is now producing 3,000,000 feet daily. The pay was found at 4,745 feet. The company has three other wells drilling: The Meister in Hebron is at 4,740 feet; the Hillegas in Hebron is at 4,581 feet, and Bennett in Ulysses Township is at 3,051 feet.

Resume of other developments follows: Allegany Gas Co., drilling at 900 feet on Cummings lands, Hebron; at 4,385 feet on Zerbie, McKean County, and spudding on Penn State land. No. 3 Booth, spudding. Nos. 1 and 2 are good producers. United Producing Co., spudding in on Willsey farm. Hanley & Bird, fishing on Gooch farm, and rig going up on Currier farm, Genesee Township. North Branch Development Co., drilling at 3,450 feet on Herron farm, Oswayo Township, and shut down on Doty farm, Hector Township, because of lack of water.

Bayless Natural Gas Co., two locations and two rigs on Fred Estes farm. Sinclair, drilling at 2,100 feet in Willing Township, Allegany County. Empire Gas & Fuel, drilling at 1,500 feet on state lands in Greenwood County, New York. Cunningham Natural Gas Co., drilling at 1,350 feet in Willing Township, C. D. Regan farm. Belmont Quadrangle Co., location on Clark farm, Independence Township, Allegany County, New York.

New York State Fields

Completed at 945 feet, Maynard W. Bell and others' No. 3 on the Smith farm at Four Corners, near Rushford, Allegany County, New York, came in for a small producer. The sand, similar in character to the Bradford, was 19 feet thick. No. 4 is spudding in 500 feet from No. 3. No. 1 is a producer and No. 2 was completed as a dry well.

Fifty strings of tools are running in the Allentown district, Allegany County, New York. Seven are on the Messer Oil Co. lease at Vosburg, where a toolhouse, tractor building and power house are under construction. A new power to handle 60 wells will also be added on this property. Six strings are on the Patterson, Boyd and Woodson lease, where a power house is nearing completion. Other strings are located as follows: Four on the Bradley Producing Co. lease, Allen farm; one on the Conkling & Reeland lease at Vosburg; one on the Albert Oil Co. lease, Howe farm; two on the Ebenezer Oil Co. lease, Allen farm; one on the Albert Oil Co. fee, Hog Brook.

The first test for deep oil and gas sands in the vicinity of Whitesville, Allegany County, New York, is being made on the Robert A. Clarke farm. The location for the test was selected by a geologist of the Booth Syndicate of Bradford.

Drilling on state land at Rock Creek, Steuben County, Empire Gas & Fuel Co. is down 1,200 feet. The test found the Penny sand, first key horizon, at 840 feet, indicating a rise in the structure in reference to the Weber well, also on Rock Creek, which is producing 1,000,000 feet daily. A better position on the anticline is indicated for the new well, although conditions met before encountering the Oriskany sand may change the outlook.

Eastern Fields

(Continued from Page 72)

County, Philadelphia Oil Co. has reached 2,220 feet in No. 2 on the Hulda Jenkins farm. The top of the Big Injun sand was at 2,028 feet. Carnegie Natural Gas Co. is down 325 feet on the N. B. Redd farm. Raymond Orrill and others have reached 1,840 feet in No. 4 on the G. L. Walker farm. Union Gasoline & Oil Corp. is drilling at 1,480 feet in a second test on the Mary B. Lindley farm.

In South Franklin Township, Washington County, Carnegie Natural Gas Co. will drill No. 394 on the S. A. Dague farm from the Fifty-Foot sand, a light gas well, down to the Fifth sand. This well is about 2,300 feet southwest of the good producer on the Alberta Iams farm. In the same township, its No. 1 on the C. T. Dodds farm will also be drilled to the Fifth sand or oil pay. This well is about 3,700 feet southwest of the Iams well. E. H. and J. B. Tague are about due in the Dunkard sand in No. 10 on the Adeline D. McKennan farm and are ready to start No. 11.

West of Point Lookout, Furman Nuss & Co. are fishing for the bit on the Jason Buchanan farm. This company is preparing to drill deeper No. 1 on the S. C. Weir farm from the Fifty-Foot sand down to the Fifth sand oil pay, about a quarter mile south of Van Buren.

In Greene County, J. B. Orndoff has started drilling on the W. H. Scott farm in Springhill Township. In Richhill Township, Wasmuth and Callahan are drilling on the F. W. Baldwin farm.

In Houston, Washington County, the Canonsburg Iron & Steel Co. is drilling on its own property at 2,190 feet.

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We are spudding in a test well off the Grand Saline Salt Dome in Van Zandt County, Texas, 10 miles northwest of the Van field. This dome is the highest dome in Texas and said to be the largest. The block has been a prospect for oil for 20 years and is in the trend on the west shore line of the basin.
Information furnished on request.
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